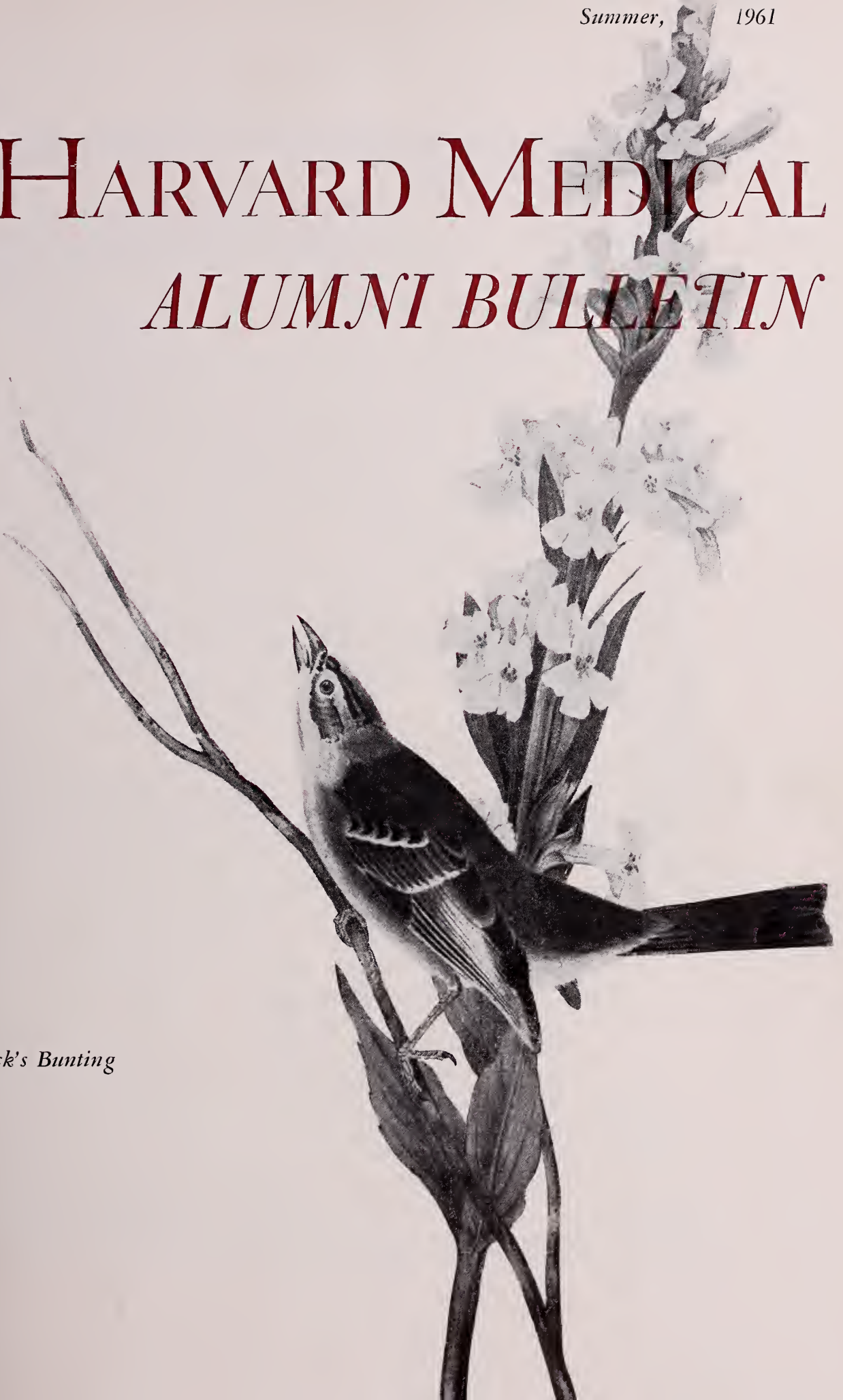


Summer, 1961

HARVARD MEDICAL *ALUMNI BULLETIN*

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LETTERS



Haugh-Haugh

To the Editor:

It was indeed a most enjoyable experience to read Mr. Knatchbull-Porteous's comments on Sir Cedric Featheringstone-Haugh in a recent copy of your magazine. But estimable as this British surgeon may have been, "toilers in this vineyard" have long recognized that the suture needle owes its fame to the great St. Petersburg clinician, P. T. Balushevsky (pronounced Balushevsky) who, as early as 1837, was employing this instrument frequently in his valuable experiments on the Kolchaks. While Balushevsky's wit may have been less sharp than Sir Cedric's (indeed, he was a singularly humorless man), the "Father of Russian Medical Research" does not deserve so devastating a slight. I am myself at work on a biography of Balushevsky, and would welcome any correspondence concerning him, or the "suture needle controversy."

HENRY P. GLADBULL

To the Editor:

Nothing in a very long time has pleased me more than your sympathetic review of the biography of my old friend and mentor Featheringstone-Haugh. I was even better acquainted with his late nephew, Lord Cecil Haughstone-Haugh, who performed such outstanding service via wireless during the last War.

However, I cannot refrain from correcting the account of Sir Cedric's *bon mot vis-à-vis* the waitress at the Pub Club (or perhaps it was on another occasion) when he said, "*Ma soeur, ces six saucissons-ci sont sans sauce!*"

I thought this bit of hisstory should not go unrecorded.

HUGO FLEIKETT

Hope for Harvard

To the Editor:

Congratulations to Jack E. Tetirick for his excellent write-up of the first voyage of the *S. S. Hope*. I am especially interested because I was scheduled to go out to the *Hope* for a term in obstetrics and gynecology. But I developed a leaky diverticulum

and could not go. Tetirick's write-up is refreshing, the picture terrific. It is almost like being along.

One matter of importance that may have been missed here. The original medical officer of the *Hope*, in charge of general operations, was U.S.S.N. Captain Paul E. Spangler, '23. Spangler will be remembered from Pearl Harbor and subsequently as the moving spirit in the building and organization of the big Naval Hospital in Oahu. He is a perfect man for such a distinguished job and, as far as I know, is still in the driver's seat. I myself and the rest of his classmates remember him warmly.

GOODRICH C. SCHAUFFLER, '23
Portland, Oregon

Dear John:

I have just had a letter from my classmate, Paul Spangler, formerly of the U.S. Navy and now aboard the *S. S. Hope* in Indonesia. I am sending you the enclosed paragraph which I think you will find of rather unusual interest.

JAMES C. WHITE, '23
Massachusetts General Hospital

"I just had to write you again to report that my last and final rotating surgeon has joined the ship. Yes, you guessed it. He also is Harvard and PBBH trained. To me it is quite unique that every general surgeon we have had on the ship is a Harvard graduate. Four of us also M.G.H., one PBBH and one Columbus trained with Dr. Zollinger. To recapitulate there were first Drs. Tetirick and Ratcliffe, then we had Richard Ireton who trained with Zollinger and is Chief of surgery at the V.A. Hospital in Dayton, Ohio. The last man is Craig Leman who is Brigham trained and is now practicing in Corvallis, Oregon. No other school approaches this record and to me it is quite remarkable. No special effort was made to recruit men from any particular school. I just can't get over the fact that the "Luck of the draw" would send all our surgeons from Harvard. I am quite sure this news item would be of great interest to the Alumni Bulletin."

CAPT. PAUL E. SPANGLER, '23

BOOK REVIEW

EXPERT SKIING, David Bradley, Ralph Miller, Allison Merrill; Holt, Rinehart and Winston, New York, 1960; 224 pages; \$12.50

Two of Harvard Medical School's graduates and a non-medical confrere have joined forces to produce one of the more impressive new books on skiing. This is a luxury book, almost folio size and not intended as a hip-pocket trail guide.

David Bradley, the senior author, is now teaching English in Finland. He was at one time a member of the Dartmouth Ski Team and is also a member of the Class of '44 at H.M.S. A writer of some experience, his books include *Journey of a Johnny-come-lately*, (an off-beat biography of an off-beat editor: the late John Clark of the *Claremont*, N. H., *Eagle*) and *No Place to Hide*, the story of the first atomic bomb tests in the Pacific. Ralph Miller, official holder of the world's down-hill speed record, and a former Olympic skier, graduated this year from H.M.S. Miller is the model for countless excellent pictures showing various skiing techniques and turns. Allison Merrill, the third author, is the current Dartmouth Ski Coach and a former Olympic Skier.

What intrigues this reader was the book's combination of clear instruction with good pictures and a beautiful format. The excellence of the writing puts it quite apart from other books on the same subject. There may be a tendency to use too many pictures; at times, they seem to blend into one another, so that emphasis cannot be obtained and clarity is lost. But for the intermediate skier, such as this reviewer, there is much information that can scarcely await another season's arrival for trial.

What heartens particularly is the thought that once again Harvard Medical graduates have exhibited their diversity of accomplishment and interest.

JOHN R. BROOKS, '43B

Harvard Medical Alumni Bulletin

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HARVARD MEDICAL ALUMNI BULLETIN

VOL. 35

SUMMER 1961

NO. 4

The Cover (Story on page 10):

John James Audubon named Shattuck's Bunting for his friend George Cheyne Shattuck, Jr., Dean (1864-69) and first Jackson Professor of Clinical Medicine. Not only have birds been given the names of H.M.S. professors, but a lizard (*Anolis bremeri*) was named for J. Lewis Bremer, Hersey Professor of Anatomy until 1941; and three genera of flowers (*Bigelowia*) bore the name of Jacob Bigelow, who became the first Professor of Materia Medica in 1815. It is fortunate that these men secured their immortality in other ways, for the *Bigelowia* were later reclassified, Shattuck's Bunting was found to have had a prior claim, and *Anolis bremeri* was never seen again. (We won't go into Tyzzer's Waltzing Mice or the Berry-Berry.)

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Advertising: Milton C. Paige, Jr., 8 Fenway
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Along the Perimeter



Portrait of a Dean

AN audience of the most distinguished of Harvard's teachers overflowed the Faculty Room in Building A on May 25, as the Dean and Faculty gathered to honor C. Sidney Burwell, Dean of the Medical School from 1935 to 1949 and Samuel Levine Professor of Medicine, *Emeritus*. The gathering of so many who symbolize Harvard Medicine made abundantly clear the closeness of the ties and the importance of Dr. Burwell through a long and critical period of Harvard Medical School history. Dr. Burwell, who readily acknowledges his role as the "last part-time Dean in history," had the unusual ability and luck to combine with deaning, investigation, teaching and clinical duties.

Baird Hastings, who made the first address, was himself a revered representative of the School as the Hamilton Kuhn Professor of Biological Chemistry and Head of the Department from 1935 to 1958; Dr. Hastings unveiled his own work of art on this occasion, a chart showing "the scholarly cellulose output of CSB — better known as his bibliography!"



Receiving line: Mrs. Burwell, Samuel Levine '14, Dr. Burwell and the artist, Mrs. Irene Higgins.

Lawrence Brown

Commenting on the factors which have affected the rising curve and excellence of Sidney Burwell's scholarly publications, he cited first and foremost Dr. Burwell's wife, Edith Churchill Burwell, "responsible for the continuous upward sweep of the curve, in fair weather and foul."

"Second was the fact that Dr. Burwell had a laboratory and regular clinical responsibilities at the Peter Bent Brigham Hospital throughout his tenure as Dean. Later, he was to have the opportunity to initiate and participate in a new field of clinical investigation relating the physiology and biochemistry of pregnancy to diseases of the respiratory and cardiovascular systems. In this phase, he assumed clinical and research responsibilities at the Boston Lying-in Hospital as well as at the Brigham."

Filling in the word portrait, Dr. Hastings chose five words: *Heart, Disease, Pregnancy, Physiology* and *Management* (all of these words appear in Burwell-Metcalf's book on the cardiovascular problems of pregnancy). *Heart* he cited as Dr. Bur-

well's medical specialty and also his most prominent and endearing characteristic; *Disease*, he said, was Sidney Burwell's lifework: "first he has always ensured that the patient is on his side — even if it required making the patient mad!" *Pregnancy*, he said, "is what he has been full of all his life . . . defined by Webster as the 'state of being with young' and 'the quality of being laden with important meaning,' Sidney Burwell qualifies as pregnant on both counts." As for *physiology*, Dr. Hastings said, "In the dedication of the 1951 *Aesculapiad* to Dr. Burwell, the Harvard Medical students of 10 years ago happily recognized this quality when they wrote: 'He has made physiology a new tool in the care of the sick.'"

And finally *management*: "During the 14 years as our Dean, he had a lot of managing to do. Sometimes the ends were not immediately accomplished. Some were utter failures — such as his attempts to stop the leaks in the lower corridor connecting A and C buildings. But more often his management resulted in progress: It

is of note, he said, that professorships in Physiology, Pharmacology, Bacteriology, Legal Medicine, Biological Chemistry, Medicine, Surgery, Pediatrics, Neurology and many others were filled during his tenure; Dental Medicine at Harvard was reoriented to a position of equal excellence and objectives with the medical sciences; educational and research activities of the Harvard Medical School were maintained at a high level during World War II when many members of the Faculty were in the Service and in the Government. This "Baird's-Eye View" of Dr. Burwell did not omit the mention of still another, a human dimension, "his tender affection for all living things, as all those of us who have visited him at his home close to the salt marshes of Ipswich will testify."

George Thorn, Chief of Medicine at the Peter Bent Brigham Hospital, recalled the rather unique situation which existed when Dean Burwell was simultaneously Dr. Thorn's subordinate as founder and head of the Cardiovascular Research Laboratory at the Brigham. "If anyone could have made a young person feel comfortable, Sidney Burwell did." Dr. Thorn mentioned Dean Burwell's establishment of the "Committee of Eight," a group led by President Conant which standardized appointment procedures and began the clarification of the complicated spectrum of hospital relations during the late Forties (the latter laid the foundation for the creation in 1956 of the Harvard Medical Center). He cited the initiation of close relations between medicine and obstetrics at the Lying-in Hospital through the creation of the medical research lab and medical group, chiefly staffed by physicians with joint appointments at the Brigham and Lying-in Hospitals; and the teaching role played by Dr. Burwell at the Brigham during the War when he was one of the few experienced Faculty remaining.

As he works on a new history to succeed Harrington's (published in 1905), in his bright renovated office high in the Warren Museum, Dr.

Burwell will have the opportunity to read through the album presented at the end of the program by Dean Berry containing the good wishes of those who were unable to attend. Hanging on the northeast wall of the Faculty Room is Mrs. Irene Higgins's portrait. She has created the effect of a shaft of light falling on the face and smiling blue eyes. When he saw himself on canvas, Dr. Burwell was heard to exclaim: "I look alive!"

The Prize is Dead —Long Live the Prize!

The elder Nicholas Boylston, maternal uncle of Ward Nicholas Boylston, in keeping with the fashions of his day, was wont to wear a turban when sitting for formal portraits. President Pusey noted recently at the gala 150th Anniversary Dinner of the Boylston Medical Society that he was himself acquainted with several such portraits hanging about the College. Ward Nicholas Boylston was born Ward Hallowell and adopted along with the Boylston name his maternal uncle's philanthropic tendencies, but did not share the fondness for mad hats. For Ward Nicholas appears in the Gilbert Stuart portrait mercifully bewigged and bearing a strong resemblance to Stuart's portrait of George Washington.*

It was the younger Ward Nicholas Boylston who, around the turn of the nineteenth century, became a patron of Harvard Medicine at a critical period in its infancy. With the income derived from vast family timber holdings in Massachusetts and Nova Scotia he endowed four important and today often confused benefices at Harvard. In 1800 he proposed to provide the embryonic Medical School with a "small but well-selected library of the most approved authors" with the promise of additional publications as they appeared — of which he gave

*The author of "Diagnosis Deferred" noted in the Spring *Bulletin* that Ward Hallowell's grandfather was Dr. Zabdiel Boylston, the famous advocate of small-pox inoculation.

many. In addition he generously provided a book fund, whose surplus income, he suggested, should be used as "yearly premiums or prizes to the authors of the best dissertations on such physiological, medical or anatomical subjects as may be most useful."



Boylston Prize Medal

But this initial assistance to the Harvard medical effort did not satisfy him, and before he died he had made provision for three great works: first, the creation of a building in the Harvard Yard to house an anatomical and medical library, a lecture hall, and chemistry laboratory, and a museum, now known as Boylston Hall; second, the endowment of the Boylston Medical Prize; third, the provision of a fund to allow the award of cash, books or instrument prizes to authors of the best dissertations written by members of a student medical society, who adopted his name in "The Boylston Medical Society of Harvard University."

Newton Hyslop of the Class of '61, rapidly becoming the definitive biographer of Ward Nicholas Boylston, emphasizes that he was one of the early and today largely unappreciated benefactors of medicine in this country, predating many who reaped more fame. "He recognized," says Hyslop, "the dearth of basic medical information and encouraged search into areas of ignorance."

Boylston, who was quite content to glorify the family, possessed a passion for detail. His will, which now resides in the Harvard Medical Ar-

chives, runs to twenty pages. As late as 1810, he is recorded as having successfully persuaded the judging committee to include among Boylston Prize questions an inquiry as to the most convenient, inexpensive and painless artificial substitute for leeches in bloodletting!

Until the recent sesquicentennial celebration, however, only one of his endowments — the Boylston Medical Society — continued to perform its original function. Boylston Hall, built in 1858, was not destined to serve the Medical School. The latter up and left the Yard for Boston in 1810, never to return. Boylston Hall has now become the Modern Language Center of Harvard University. The "Boylston Collection" of medical books was for many years during the nineteenth century believed lost. The collection was finally found entombed in the Cambridge Public Library, whence it was rescued for the Boston Medical Library on the Fenway. This collection will once again come home to Harvard when the Boston Medical Library joins us soon in the Countway Library of Medicine.

The Boylston Medical Prize ceased to be awarded after 1923. Throughout the nineteenth century, however, it was a much coveted award. Famous physicians who won the award include such names as George Cheyne Shattuck (1806-07); Oliver Wendell Holmes (1835-37); and John Collins Warren (1872). The last award, in 1923, was made to Joseph T. Wearn and A. Newton Richards, both later to become famous: the former as Dean of Western Reserve Medical School and a pioneer in reorganizing medical education, the latter as a world-renowned pharmacologist.

With the passing years, the intricate machinery required to award the Boylston Prize became unworkable and the Prize entered a period of extensive discussion. A decision was sought in the courts by Harvard to liberalize the provisions and to emphasize the promotion of research in the medical sciences. Finally, in 1948, the decision was granted freeing the

ground rules and enabling the Corporation to revert from the legal requirements of Ward Nicholas's endowment to its "motivating spirit": the simultaneous promotion and reward of medical excellence in research and scholarly achievement.

At the celebration of the Society on May 25, libations of Volnay Clerget Buffet Premier Cru (selected by Chevalier de la Légion d'Honneur David Rutstein) ushered in the first awarding of the Boylston Prize in 38 years. Dean Berry presented a Boylston Medal and \$1000 to each of four Harvard medical graduates, the only graduates to have received their M.D. degrees *summa cum laude*: Bernard D. Davis, '40, Professor of Bacteriology and Immunology and Head of the Department at Harvard ("In his biochemical studies of microbial genetics he has used bacteria as model cells, and by creating in them a variety of genetic diseases, has worked out biosynthetic pathways and regulatory mechanisms that seem to be common to all living organisms."); Carroll M. Williams, '46, Professor and Chairman of the Department of Zoology at Harvard ("By recognizing that hormones govern much unfolding of beauty on earth, whether in butterflies or in ladies, Dr. Williams has opened up an important approach to the fundamental problems of differentiation."); Zanzvil A. Cohn, '53, Research Associate at the Rockefeller Institute for Medical Research and Assistant Physician at the Rockefeller Hospital ("By studying with modern biochemical techniques the function of the granules of the leukocytes, he has raised to a new high level the analysis of a major aspect of the host parasite relationship."); and John N. Loeb, a member of the Class of 1961. In presenting the medal and prize to Mr. Loeb, Dr. Berry emphasized the over-all excellence of his academic accomplishments and explained that no student had ever excelled him at H.M.S.

This was the first time that the awarding of the Boylston Medical Prize had been coupled with the Boyl-

ston Medical Society, yet the joining was quite fitting since both share a common benefactor and common interest: "No mere social club" has long been the admonition to members of the elite group of the Society and the Dean, in reviving the prize after 38 years, recalled Oliver Wendell Holmes' disinclination to extend the Society to the whole student body and his feeling that membership should be the reward of zeal for search. The Society, Holmes had emphasized, "had for many years assisted to raise the standard of medical acquirement of this institution."

Doctor Berry emphasizes that no automatic coupling of the prize to the *summa*, or to any other special accomplishment, is intended for the future. "It is to be recognized as a great distinction," he says. "The prize will be awarded from time to time in the future, not at any regular intervals, but whenever outstanding merit should make an award desirable. In this way it will provide an incentive to research in a broad and indirect way, much as does the existence of the Nobel Prize."

Harvard Medical Chorus

While the courtyard blazed with color: azaleas, dianthus, calceolaria, orchids and Japanese lantern light, the Harvard Medical Chorus sang their spring concert in the Concert Room of the Isabella Stewart Gardner Museum on May 12th. A varied program included Buxtehude's "Rejoice Beloved Christians" and Schubert's "Mass in G," both well-received by a capacity audience. Many listened as they strolled through the inner court of the Museum. Accompaniment was furnished by a small string ensemble composed of medical students, doctors and people affiliated with the medical area. Still in its childhood, and a rather precocious one at that, the Harvard Medical Chorus, under the direction of Dr. James E. C. Walker, begins its fourth season next Fall.

Inside H.M.S.: FORBIDDEN FRUIT

Robert Browning's *Blot in the 'Scutcheon* is pretty bad theater fare, but a daily dining-room drama is being perpetuated in Vanderbilt Hall which might bear the same title. I mean the cuisine is not so hot.

Not long ago a graduate¹ returned to Vanderbilt Hall and was dismayed. "What," he inquired, "has happened to the cohesive, group-type community that once was V.H.? There is a certain indefinable emptiness about the place . . ." And after he had shuffled back from the *salle-à-manger* the emptiness had been defined: it was located in the vicinity of his pyloric antrum. His appetite had been not at all slaked by the dining hall fare. "It is no wonder," he commented, "that annually numbers of medical students escape the dormitory for flats with kitchen privileges solely because they are *hungry* and want to live." (I have paraphrased his statement for the sake of expediency.)

What exactly seems to be cooking, as it were, in the dining hall? Too often it is something which resists gastric hydrolysis and is too exotic for categorization by taste receptors. But complaints of dormitory cooking are common in this age of hypercritical youth — is the outrage of the HMS dormitory resident little more than the expression of the usual philosophy of inherently finical young doctors? Faugh. The fact is that a state of profound culinary languor exists in the Vanderbilt dining hall. Let us analyze the picture a little more closely.

The policy of the dining hall is contained in five (5) unwritten, but cardinal, principles: 1) small servings; 2) second servings only of the non-essential, semi-comestibles, such as eggplant, squash and devitaminized potato; 3) frequent substitutions; 4) a hostile attitude at the higher administrative levels, and 5) forbidden fruit. The last principle is a unique system of evaluation in which four



ounces of warmed tangerine nectar is equated to one banana. That is, one may have two four-ounce servings of juice or one juice and one banana; however, and this is the heart of the matter, one may not take two bananas and no juice.

The food in V.H. is provided through the central purchasing agency of Harvard University. Two hundred and thirty persons are served at each meal, each paying a board rate of \$600 a year. The food at the Cambridge houses is provided more tastily, less testily, and in larger amounts; seconds are allowed of main courses. The food costs the same in Cambridge, more people are being served more food, yet here things seem to be awry. I have deliberately specified only the attitude of the administrators, because the people who actually serve the meals are congenial, helpful, and often embarrassed by the sham feedings to which they are innocent accessories. However, the higher echelons often exhibit a dietary smallness which smacks of an Ancel Keys starvation experiment.

Menu substitutions are really not

a considerable problem. Few people really *care* that flat potato salad replaces flavorless baked beans, or frankfurters replace individual pizzas. (The individual pizza is an international travesty consisting of an English muffin covered with melted American cheese, and drenched with tomato sauce.)

What sort of positive comment exists? Well, the dining hall is a salad-fancier's delight. What sort of positive proposals might the student body make? Well, that the policies of the Harvard University halls be implemented here, by dint of the V.H. dietary administrators' studying the mechanics of the Cambridge dining rooms, and that a more benevolent facies be assumed by those in control of the kitchen.

Strange to relate, the HMS student does not Ciceroically live to eat. Rather, something is amiss in the scultery to turn students' thoughts incessantly to food. The smudge in the 'scutcheon is probably spattering grease.

PEPPER DAVIS, '63

¹Graduate, class of '51, name withheld.



Working in the Chemistry Laboratory of the Boylston Street Building around 1900.

Transplanting the Faculty

The Harvard Club of New York City honored our Dean and Faculty of Medicine on May 3 at their spring dinner, one of the Club's program of University-oriented events. Nearly 350 guests — one of the largest audiences ever to assemble for one of these dinners — included alumni of the College and of H.M.S., their wives, and deans of six medical faculties in the New York area. Other guests, and appropriately so considering the evening's program, a panel discussion of successful kidney transplantation, were members of the Commonwealth, Avalon, and other foundations which have helped to support this work at Harvard and the Peter Bent Brigham Hospital.

Dean George Packer Berry introduced the panel with an anecdote from Baron Munchausen — one involving an accidentally bisected horse, sewn back together with green laurel shoots. This remarkable remedy not only reunited the fore and aft quarters of the horse, but eventually provided the Baron with a built-in shady bower

as he rode along. Dean Berry specified that this type of transplantation is not yet a regular feature of surgery at the Brigham. He introduced George W. Thorn, M.D., Hersey Professor of the Theory and Practice of Physic and Physician-in-Chief at the Peter Bent Brigham, who traced the modern history of kidney disease and steps leading to transplantation. Dr. Thorn's distinguished colleagues, Dr. Gustave J. Dammin, Dr. John P. Merrill, '42, and Dr. Joseph E. Murray, '43, all members of the Faculty and of the Brigham staff, discussed the materials and techniques of transplanting a healthy organ from one human being to another. An artificial kidney was on display during the discussion.

Two former Brigham patients, Dr. Robert Levin and Mr. John Riteris, were presented to the audience. Each spoke briefly and warmly of their experience as kidney-transplant patients, dividing praise for their now healthy and useful lives between the Harvard-Brigham doctors and the twin brothers who gave healthy kidneys. The achievement is the more remarkable in Mr. Riteris' case, since the donor

was not his identical twin. Dr. Levin now has a busy dental practice on Long Island, while Mr. Riteris is about to graduate from Marquette University.

On exhibition in Harvard Hall for the occasion was a special group of photographs of members of the Faculty of Medicine, taken by John B. Loengard for the \$58 Million Program for Harvard Medicine, and an architectural model and sketches showing long-range development plans of the Medical School, the Schools of Public Health and Dental Medicine, and of the Associated Teaching Hospitals.

A footnote to a highly successful evening is the intelligence that kidneys were a featured menu item for luncheon the next day at the Harvard Club. It is reported that there were very few takers.

The John Wells Farley Building

In misty ceremonies in the Prouty Garden on May 4, dignitaries of the Children's Hospital Medical Center

gathered to honor the late John Wells Farley, by dedicating the new 1956 building to the colorful Boston lawyer, newspaper publisher (*Boston Herald*, 1911-1913) and corporation executive. His executive functions included such a variety of companies as the Merri-mac Hat Corporation, the Acme Fishing Tool Company and the Thompson Electric Welder Company!

As a post-retirement project, "Mike" Farley was the inspiration and moving force from 1945 to 1952 in bringing together the ten groups which now comprise the Children's Hospital Medical Center, including institutions with such quaint names and historicity as The Children's Mission to Children, The House of the Good Samaritan, and the Sarah Fuller Foundation for little Deaf Children.

Mike Farley, who died in 1958 at the age of eighty, was unanimously pronounced a "mover and shaker." "So vivid was Mike's spirit and so clear the sound of his voice," Dean Berry said, "that I — for one — would not risk incurring his displeasure or the roar of his laughter carrying before it all pomposity and affection!"

Dr. Charles Janeway recalled that when Mike Farley took office as President of the Children's Hospital in 1945, "most of the hospital's patients were quartered in small, outmoded, wooden pavilions connected by a long system of unheated corridors. Its operating suite, where the field of child surgery was practically created, and where orthopedic surgery and neurosurgery for children had made such great strides forward, appeared to have been designed for Lilliputian surgeons, and nurses' dimensions were supposed to be commensurate with those of their patients." Mike Farley, who saw the need for physical facilities, also saw beyond to the concept of a great medical center, the first children's medical center in the world, and lived to see it realized. Indeed, he foresaw the need for a drive for the Harvard Medical Center already in 1946!

William Wolbach, President of the Children's Hospital Medical Center, did not forego, in celebrating the

present, to jump to the future. "If he were here," he said of Farley, "I think



The Paul Ehrlich Prize awarded to Albert H. Coons, '37.

he would observe that although we have been raising money for a new building for five years and have accumulated better than two and one-half million we still do not have adequate research space for our staff and that our outpatient facilities are almost disgracefully inadequate in every sense of the word. He would also point out that we have just received a magnificent gift for the professorial endowment of a new department of Neurology but have inadequate space to house it."

Dr. Janeway noted that the accumulation of over \$100,000 for the John Wells Farley Memorial Fund will be used to assist interns and residents (the Children's Hospital is one of the few hospitals which still does not pay its interns).

In a fit of whimsy, everyone seemed bent on recalling Mike Farley's admonition to "hitch one's wagon to a star," rather than hitching it "to a turtle"; most of them admitted he was often wont to express himself in earthier terms. Mike Farley, the man who was too modest to accept the honor within his lifetime, has been memorialized at the Children's Hospital Medical Center which he did so much to create.

Honors and Elections

In recognition of his significant work in the field of immunology, Albert H. Coons, '37, was recently awarded the 1960 Paul Ehrlich Prize. The bronze medal and 12,500 German marks were presented to Dr. Coons in March at Frankfurt am Main, Germany, by the "Der Stiftungsrat der Paul Ehrlich-Stiftung."

During the two days of Alumni and Class Day celebrations, certain names stood out in boldface:

John H. Lawrence '30 of Orinda, California, Professor and Chairman of the Division of Medical Physics, Physician-in-Chief of the Donner Pavilion, and Director of the Donner Laboratories at the University of California, Berkeley, was named President-elect of the Harvard Medical Alumni Association. **Samuel A. Levine '14** will become President of the Association; retiring as President is **Charles B. Huggins '24**. **Bradford Cannon '33** was elected Treasurer; reappointed to serve as Vice-president for one year was **William R. Pitts '33**; reappointed to serve as Secretary for two years was **James H. Jackson '43A**. Newly elected Councillors of the Alumni Association were **Sylvester B. Kelley '29**, **Augustus S. Rose '32**, and **David H. Clement '35**. Retiring Council members were **Joe V. Meigs '19**, **Herbert C. Moffitt, Jr., '41**, and **Howard B. Sprague '22**.

At Class Day ceremonies, **David R. Challoner** received the Harvard Medical Alumni Association Award. Other honor awards were as follows: the Leon Reznick Prize Award for "showing the most promise in research" to **John M. Stein**; the Henry Asbury Christian Prize, "for diligence and notable scholarship," to **John N. Loeb**; the Massachusetts Medical Society Prize to **Dale E. Wenlund**; the Borden Undergraduate Research Award to **Luther Stryer**; the Maimonides Award of the Greater Boston Medical Society to **John R. Wilber**; the Boylston Medical Society Prize to **Robert DeLong**; the James Tolbert Shipley award to **Robert R. Young**.

←Top: George Cheyne Shattuck, Jr., as a young man. Bottom: John James Audubon at fifty-three; oil portrait painted by gaslight in 1838 by George P. A. Healy.



Shattuck's Bunting



John James Audubon and George Cheyne Shattuck, Jr., a sickly medical student, made a trip to Labrador; later, Audubon named a bird to celebrate his friendship with the famous Harvard Medical School Dean.

George E. Gifford, Jr., M.D., M.A.





"THE Die is cast," wrote the famous American naturalist, John James Audubon, in 1833. "I go to the coast of Labrador this season."

In the summer of that year, Audubon and five young companions sailed to Labrador to study birds, for Audubon's monumental *Birds of America*. The group sailed from Eastport, Maine, through the Strait of Canso, visited the Magdalen Islands and passed Bird Rocks. They anchored in American Harbor, Labrador, June 17th, 1833. From that point they cruised easterly along the southern coast of Labrador, touching at Little Macatine, Baie de Portage and Bras d'Or. They began the return trip on August 11 and reached Eastport again on August 31.

Accompanying Audubon were his son, John Woodhouse Audubon, and a friend from Maine, John A. Coolidge. All three of the other men had strong medical associations: Thomas Lincoln was the younger brother of Dr. Benjamin Lincoln; William Ingalls was a future physician and son of Dr. William Ingalls; and George Cheyne Shattuck, Jr., was to become the first Jackson Professor of Clinical Medicine (1855-1859), the fifth Hersey Professor of the Theory and Practice of Physic (1859-1874) and the sixth Dean of the Harvard Medical School (1864-1869).

In 1833, George Cheyne Shattuck, Jr., was a sickly medical student and son of a forceful and distinguished physician father. The senior Shattuck was also physician to Audubon. It seems that, in return for a healthful cruise for his son, Dr. Shattuck offered to underwrite Audubon's endeavor. The Shattuck correspondence reveals that Audubon invited young Shattuck to accompany him on his Labrador trip, well primed with parental solicitude. The letters between father and dutiful son give a delightful picture of the trip.

Shattuck, Sr., to Shattuck, Jr., at Eastport, Maine

Boston, March 24, 1833

My Son,

Since my last I have received the *Birds of America* by J. J. Audubon (vol. 1st) and a splendid work it is too. \$200 for the vol. & \$20 for half binding in Russia backs and corners. His Turkeys, Eagles, Owls, Hawks etc., etc. are magnificent! superb! transcendent!

M. Audubon has imparted to me an invitation for you to accompany him on the Labrador Coast the coming summer — of course I thanked him. He will be in Eastport the first of May. Your lectures will not have been finished at that time. Dr. Parkman* has recently obtained for him two new subscribers . . . accept for your self the renewed expression of love from your

Father,

G. C. Shattuck

Boston, May 8, 1833

My Son,

. . . I have also sent you letter paper said to be

*Dr. George Parkman, who was murdered by Dr. John White Webster in 1849.

made of linen rags, both for your journal and for the letters you may have occasion to write. I beg you to make a daily record of what you may see, and to write to me as opportunity may offer. Let your journal be written in a legible hand writing . . .

Shattuck, Jr., to his Father

Eastport, May 9, 1833

He (Mr. Audubon) insists much on a large journal in which he will make me write every night an account of the day's work, and then read it to him. I shall have to work like a horse as he says.

We will probably sail in about a fortnight, and will be absent two and a half or three months. In the mean time I shall be in training under the direction of Mr. Chadbourne, and I am rejoiced I came on. I have seen young Audubon also, and everything looks favorable for a season of interest and instruction.

Shattuck, Junior, to Shattuck, Senior

Eastport, May 15, 1833

Dear Father,

Mr. Thomas Lincoln goes with us, and being unable to procure a gun, I offered your services at home to procure him such an one as will be necessary. Mr. Audubon recommends (sic) a double barrelled gun, percussion lock, long barrels, such as will cost forty (sic) or fifty dollars. He would give a larger price if necessary. A bullet mould will be necessary, and Mr. Audubon has just informed me that I shall need such an one, for my gun. He would like also a couple of thousand caps. I would ask for myself a stout pair of Spectacles number thirteen, or I may lose mine and should then be in a dilemma. We shall start the first of June, probably in a vessel of one hundred and ten tons. . . . If a book could be found giving an account of Labrador or a chart of the coast, it would be very acceptable. Will you ask Mr. Perkins to send me his reminiscences of that country. I have passed my Time chiefly studying conchology with Dr. Ray, as it has rained since the first day I was here. Will you send also a chest of such medicine as you think necessary, and Mr. Audubon would like some of that medicine given to him, when sick last winter, and visited by yourself and Dr. Warren.

In haste

Yours,

G.C.S., Jr.

Dr. Benjamin Lincoln (a friend) to Shattuck, Jr.

Burlington, Vt., 12th May, 1833

. . . Would to God I could go with you. Will you not return by the way of Lake Champlain?

I do not know how your vegetable eating will do in a country where men eat Fish — "feathers and all." I think you will find your health improved by the cruise and you will to the day of your death rejoice that you went . . .

Audubon to Shattuck, Sr.

May 15, 1833

My Dear Sir,

I am very glad indeed that you have allowed your son to accompany me on my present voyage to the Coast of Labrador — depend upon it, I shall take as much care of him as of my own Son and hope to return him safely and perhaps somewhat improved in the beginning of October next.

I am not in need of the needful at present — I Charter a good schooner* here, commanded by an able person acquainted with the Coast of the Country we are about to visit, and although we pay perhaps a high price for her, I have thought it prudent at least and have such a one as will comparably render us comfortable in a Cold and Wild Country. Should I be in want of Cash when we return and when our expenses must be paid, I shall avail myself of your kind offer to accept a Draft upon you. We intend sailing weather permitting on the 1st of June next and proceed immediately for the Bay

Chaleur, where we will tary (sic) about a fortnight and Cross to Labrador as soon as the Ice will allow us to do so. Remember me kindly to our most worthy friend Doc. Parkman and family as well as your own Circle and believe me My Dear Sir with great Esteem

Your friend and ob't ser't
John J. Audubon

Shattuck, Jr., to his father

Eastport, May 22, 1833

. . . This morning I have taken a long walk with Mr. Audubon, notwithstanding the rain.

Mr. A. has made all arrangements for his vessel. She is a schooner, measures one hundred and six tons, and is said to be a very fine sailor. He pays three hundred and fifty dollars a month for her and each of us is to pay three dollars a week for board. We are to be victualled for five months and among the articles to be put on board are potatoes; rice; beans; beef; pork; butter; cheese. We shall live like princes. You can not expect us before the first of October. Mr. A. says I must return to Boston with him via Quebec . . .

Shattuck, Jr., to his father

Eastport, May 26, 1833

The gun is just the thing I wanted long and strong, the ammunition and accoutrements are all of the first quality, nor can I express too strongly my sense of obligation, at these renewed instances of your kindness and liberality.

I returned last evening from an excursion in the revenue cutter *Swiftsure* to the island of Grand Manan. This island is distant some twenty miles from here, is ten miles long, three or four broad,

*The Schooner *RIPLEY*, a staunch new vessel of 106 tons.



and belongs to his British majesty. We went on board the vessel, Wednesday evening and the anchor was weighed about three the next morning. We passed along the western shore of the island, where we saw steep precipices, . . . a rough reception to any vessel driven upon it by a storm. We passed round the northern extremity of the long island and stopped in a small harbor of an island, two miles east of Grand Manan. We went on shore, and called at the house of the only inhabitant Mr. Frankland, the governor of the island. We did not find this man at home but afterwards met him, when he expressed great pleasure at seeing us, and gave us permission to wander over his island, and to shoot as many birds, and take as many eggs, as we might wish and could find.

The island contains about two hundred acres, is very well wooded, and yields a large quantity of hay, and little else besides, except a few potatoes.

We rambled about six hours or more, and returning to the vessel, we enjoyed very much the food set before us.

After dinner, John and myself went to work to skin the birds and this task having been performed, principally however by John, for as yet I am not very expert at the business, we went on shore, it being eight o'clock to enjoy the fresh air, and to meet Mr. A. who with the Captain of the cutter, went on shore after dinner, to ramble around and to pay their respects to the governor. To the governor's house, accordingly, we proceeded, and there we found our party, having taken tea, and passed the evening there. Mr. Frankland is an old man, a native of Yorkshire in England, whence he came to this island some fourty odd years ago. He retains the Yorkshire dialect, so that you would know whence he came talking with him five minutes. He is an intelligent, kind hearted old farmer, and I was desirous to see more of him than I had opportunity. He was very hospitable to us, and his two sons accompanied us on board our vessel, to serve as guides to two collections of islands, called the two islands and the three islands which we were to visit the next day.

Having written my journal I went to bed about half past ten, and so sound was my sleep, that I did not hear the grating of the chain when they weighed anchor, between eleven and twelve that night, and I was much surprised to learn the next morning, that we were lying in a different harbor. Having eaten an early breakfast, we pushed ashore in two parties, one to each group of islands. I accompanied Mr. Audubon to the three islands, which

we explored very thoroughly, finding however scarcely any birds. Two of a species of ducks called lords and ladies were killed by one of our party, also a bird called a turnstone, and we saw one bird very rare, called about here the sea goose, which Mr. A. was very desirous to examine, but we did not succeed in killing him. Returning on board, we found that the other party had killed some eider ducks, and a few sea pigeons, but it was evident that the ducks mostly had gone north, to their breeding places. The same afternoon we returned back to our former station, returned to the governor his sons, paid our parting respects, and continuing on from six to ten miles further, stopped for the night at long island harbor.

The next morning having taken an early breakfast we were rowed ashore, and John and myself, spent three or four hours rambling through the woods. Another party took a boat and coasted along the rocks. They shot several sea pigeons, a most beautiful bird, a white spot on their wings, the rest of their plumage being black, or dark green changeable, and varying as seen in different lights. As we had a very fair breeze we accomplished our return very speedily, stopping to get some ravens. The nest in which they were found was in the clefts of a very steep rock, and one of the sailors descended to it, by attaching a rope to a tree above and climbing down, being obliged to shoot in afterwards, as the rock over juttet considerably. The ravens were about three weeks old, and the ugliest birds without exception that I ever saw. Mr. A. thinks of taking one to Labrador, making a pet of it, and teaching it to talk. It was five o'clock when we landed at Eastport, having had a very pleasant time.

Do let me find a letter at Eastport on my return, giving an account of whatever has happened during my absence. It is not with indifference, I assure you, that I contemplate, an absence of three months in which I probably shall not hear a word from home. But there is a God who orders all things for the best, and in whose hands we all are. Let me then again subscribe myself,

Your's dutifully and affectionately,

G.C.S., Jr.

Audubon did not seem daunted by the medical background of the Shattucks and he had a note to add in a letter to his wife, May 27th:

We heard yesterday through Doct. Shattuck that a young gentleman of Boston was coming to join us — his name is Ingalls, the son of Doct. Ingalls of Boston, but further I know not. Young Shattuck was unwell yesterday though wanting good food and I am going to have him alter his diet — he has for the last month or so eat nothing but bread and potatoes, and fresh water only — with the exercise which he now takes he would dwindle away into a drum stick — he is several days without operation and no wonder — .

Audubon's account of the trip from June 4 to August

ABOUT THE AUTHOR:

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31 has been recorded not only in his letters but in the *Labrador Journal*, and in several essays which he called "Episodes." His entries in the *Journal* are often brief but graphic. On the day of arrival of the schooner *Ripley* in American Harbor, Labrador, he noted:

Shattuck and I took a walk over the dreary hills about noon: the sun shone pleasantly, and we found several small flowers in full bloom, amongst which the *Kalmia glansa*, a beautiful small species was noticeable.

On the same day, Shattuck wrote a letter to his father:

American Harbor, Labrador, June 22, 1833

As a vessel has just come into the harbor I will prepare a letter giving some account of myself since my last dates. Thursday June 6, at twelve o'clock our vessel was announced as ready, and our friends who had come on board to bid us farewell, and to look at our accommodations, informed that they must step ashore. We cast loose and as we pushed off were saluted with four guns from the fort, and four from the revenue cutter. The wind was dead ahead but we beat down with the tide, and the Captain of the cutter accompanied us till we were steered clear of all difficulties, and were launched out into the bay of Fundy. We kept on and by night had beat down to Little river; a distance of twenty or thirty miles, but the wind dying away, we did not succeed in getting into the harbor. A breeze sprung up about noon the next day, which increased the next night, and Saturday afternoon we steered round Cape Sable between the mud and seal islands, rejoicing that we were clear of the bay of Fundy with its confounded tides. We passed by Halifax at a distance of thirty miles, and at night spoke the schooner *Caledonia* from Boston bound for Labrador. Monday afternoon we made Canseau and as the wind was ahead for going through the gut, we ran into the harbor, where we found several other vessels waiting contentedly for a fair wind. There are a few inhabitants at this place, who derive their support from the fishery, but the land is poor and yields only a few potatoes. We obtained however some milk and eggs, which savored very well, especially as we bade adieu to the latter when we pushed off from Eastport. The next morning at four o'clock we set sail again with a fair wind, and crossing the bay were soon in the gut of Canseau through which we had a most delightful sail. This name is given to the passage between Cape Breton island and Nova Scotia, a narrow strait where you see distinctly both shores. The N. Scotia shore is the highest but the Cape Breton shore appeared the greenest. Houses were scattered along the banks, and we saw something like a village at Ship harbor on the Cape Breton side. We stopped at Jestico island just as we were getting into the Gulf of St. Lawrence. We stopped also at the Magdalen islands, and spent a

day rambling round. We stopped at Amherst island and found a hundred and fifty families there with a Catholic priest a Monsieur Brulette from Quebec. These men support themselves by fishing and the soil yields a few potatoes. They are Canadian French, but the merchant who resides there, sells them their goods and buys their fish, is a native of Halifax, a shrewd fellow, who has made his fortune. A few wild geese breed in ponds but not on the part of the island where we were. They have foxes, hares, rats, no other wild animals. The next day we had a fair wind, passed the bird rocks, where we saw Gannets by thousands so thick, that the top of the rock looked as if covered with snow, but were unable to land on account of the surf. We passed Anticosti and arrived at this place [Labrador] last Monday, having had a very comfortable passage. We have been shooting away here but have not come to the parts where birds are most abundant. There are five vessels in the harbor from Eastport, fishing for cod, and they average about a thousand a man. Most American vessels go farther north, but we have one here from Newburyport, and one from Halifax, Nova Scotia. The fishermen are up every morning at half past two, work eighteen hours in the day, and sleep four. The fishing is done in boats off from the shore, the fish are brought to the vessels, where they are opened by one man, their heads cut off and guts removed by another, whilst a third cuts out the back bones, and throws them into the hold, where two men are employed salting and packing them away. Afterwards they take the fish out and dry them. A Captain Billings from Eastport owns these five vessels and is here with them. He is going north, and expects in August to keep two vessels for the mackerel fishery. They throw out pieces of mackerel to toll the fish, put on bait to their hook which lasts all day, and throw the fish on the deck without touching hands on them. One man can catch fourty a minute. The fishing on this coast is said to be better than off Newfoundland. The country is very rough sterile covered with moss and a few scraggy fir trees for forests. You can not conceive more fatiguing walking than over this moss. It can be compared to wading through snowdrifts. Our excursions will be made mostly in boats. We start hence with the fair wind which first blows.

Our party are all in excellent health and spirits. I never enjoyed better health. We were sea sick some days, and wished ourselves any wheres, but we recovered and our appetite returned most wonderfully sharpened. I have been obliged to give up my experiment of a vegetable diet for the pilot bread when eaten exclusively makes me very costive, and whilst I was sea sick I lost my relish for potatoes. Since we have been in this harbor we have lived on codfish which are very nice and of which we are all very fond.

For the details of Shattuck's activities while at Labrador between letters home, we can return to Audubon's *Journal*. He writes:



July 9th: Lincoln and Shattuck brought some fresh-water shells from a large pond inland; they saw a large bird which they took for an owl but which they could not approach; they also caught a frog, but lost it out of their game bag.

July 14th: After supper we all went ashore; some scampered up the steepest hills next to us, but John, Shattuck, and myself sent up the harbor, and after climbing to the top of a mountain (for I cannot call it a hill) went down a steep incline, up another hill, and so on till we reached the crest of the island, and surveyed all beneath us.

July 30th: Our young men returned from Port Eau fatigued, and, as usual, hungry; complained, as I expected, of the country, the climate, and the scarcity of birds and plants, and not a pair of moccasins to be bought; so Lincoln and Shattuck are now barefooted.

Shattuck, Jr., to his father

Bras d'Or, Latitude 51, Aug. 5, 1833

Our cruise is nearly terminated for with the first fair wind which may blow next week, we move homewards. On our way we stop at Newfoundland, and at Pictou on Prince Edward's island, so we shall reach Eastport sometime in the first week of September. How much I have improved by my opportunities, must be left to your judgment, whence we meet, as I hope we shall, some six weeks hence. We have not found Labrador, the country that the fishermen would have us believe. I expected to have obtained many curious specimens in comparative anatomy, but we have seen no quadruped larger than a rat. We have found no new plants, though we have looked closely over all the ground. Birds are much less plenty than we had been taught to expect them. Mr. Audubon has obtained much valuable information, and we all are glad that we have seen this country, for no description can convey a just idea of it. Labrador was not made for white men, and it is to be wished that it had been left in the hands of those whom God placed there. We have travelled over the country very thoroughly, and can bid adieu to Labrador without regret. If I was to come here again, I should wish to spend here the winter and the spring, as the quadrupeds of the country, such as reindeer, bears, foxes, hares, are to be seen only in this season. In the summer they retire into the interior, no one knows where. We have heard one bear, but could not obtain a sight of him, though we sought his acquaintance eagerly. Mosquitoes, and gnats are in greater abundance than any thing else.

Remember me affectionately to all friends, and accept for yourself assurances of gratitude and affection from

Your Son,
G.C.S., Jr.

Audubon's *Journal* has only two references to Shattuck after the August 5th letter: on August 5th, he wrote,

John, Lincoln, and Shattuck always ready for a nap, made this night no exception . . .

After the Labrador trip, Audubon continued his friendship with the George Cheyne Shattucks, both senior and junior. His *Journal* of 1840-1843, made while obtaining subscriptions for his *Birds of America*, contains mention of frequent visits to the Shattucks.

In the Octavio edition of *The Birds of America*, Audubon included the description of a small pale sparrow of the prairie states which he named *Emberiza shattuckii*, or Shattuck's Bunting. Of it he wrote, "I have great pleasure in naming this species after my worthy young friend George C. Shattuck, Esq., M.D., of Boston, one of the amiable gentlemen who accompanied me on my voyage to the Coast of Labrador." Unfortunately however, the bird Audubon described had been previously described by Swainson as *Emberiza pallida*, or clay-colored bunting, so the name, "Shattuck's Bunting," could not be used. Today the bird is called *Spizella pallida*, or clay-colored sparrow.

As an old man George Cheyne Shattuck, Jr., recollected:

We spent nearly three months together in Labrador and Newfoundland studying the habits of birds and making a collection of skin and eggs. We lived coarsely but comfortably with plenty of open air, exercise and very pleasant companionship.

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6. Photograph of Shattuck as a young man, courtesy of George Cheever Shattuck '05, Clinical Professor of Tropical Medicine, Emeritus, and grandson of the Dean.

Editorial

THE HIGH COST OF DYING — AND RELATED MATTERS

The *Saturday Evening Post* recently reported growing angry reaction against the commercial exploitation of death by the high-pressure sale of morbid sentimentality and expensive accoutrements in funerals. The article laments the funeral industry's attempts to equate respectability with practices and furnishings which an earlier generation of Americans thought characteristic of ancient Egyptians. The grieving survivor is apparently a too easy mark for the unscrupulous funeral director. According to this article, an inexpensive, simple and dignified disposal of one's remains may be difficult unless arrangements with the undertaker are made before death and expedited through an organization such as a funeral society.

The bitter reaction expressed in this article may find resonance in many physicians. Morticians, after all, capitalize on the ultimate failure of the physician and at the same time displace him from his comfortable place in the limelight. The physician may feel further belittled by the legal requirement that the estate settle burial before medical bills. The resulting smoldering and somewhat shamefaced resentment readily bursts into flames of righteous indignation when, as occasionally happens, funeral expenses are far beyond both the family's means and the cost of the terminal illness, the doctor having submitted only a token or no bill out of sympathy for the family's financial plight. Although an elaborate funeral can be said to offer psychotherapeutic penance to guilt-laden heirs, there is no justification for the practical impossibility of obtaining a simple and economical funeral. It behooves us, nevertheless, to refrain from going up in flames over these matters.

However ugly the Madison Avenue face of organized undertaking may appear, a general condemnation of morticians is both unjust and destructive to the interest of physicians. The medical-school community depends heavily on the good will of this group and has benefited significantly from their cooperation in the past. As individuals funeral directors present the same spectrum of avarice as the population as a whole, including physicians. And, like physicians, they have their official code of ethics. Before we look at their trade journals and criticise an apparent preoccupation with the dollar, we might consider their reaction to *Medical Economics*. Functioning artery banks in the Boston area became possible through consultation with Massachusetts' funeral directors and as a result of their quick sympathy with a humanitarian enterprise and their willingness to accept personal inconvenience. Although the artery bank is now becoming a thing of the past, a similar quick response has greatly facilitated the current pathological investigations associated with the gross circulation of the brain. The Department of Anatomy at Harvard Medical School has long provided a teaching service for the Massachusetts School of Embalming, and the sympathy of undertakers with the needs of this department has resulted in their continuing cooperation in transporting unclaimed bodies from state institutions for the use of the Medical School. In the present political climate, undertakers could well shut off this dwindling source by agitating for lucrative burial of such bodies at the state's expense.

The funeral directors' cooperation is needed and has been forthcoming in another aspect of the anatomists' centuries-old chronic and recurrent problem of obtaining material for dissection: Once the source of illegal adventure and bloody riots, the procurement of cadavers seems to be passing from an era of slightly surreptitious legality to a more noble period where the subjects for dissection will be the final gifts of public-spirited citizens. Here again the mortician is an essential link in these arrangements and could, if motivated by unscrupulous self-interest, seriously hamper this program.

On the West Coast, the privately donated body is already a major and adequate supply of teaching material for medical schools, perhaps because of a freer and more exuberant public spirit, perhaps because this offers an escape from the regional extremes on the part of funeral directors described in Waugh's *The Loved One*. At Harvard, such bequests account for a still small but growing percentage of the only marginally adequate number of suitable dissection subjects. The potter's field candidate is disappearing as teaching material along with the ward patient, and for the same reason. Unfortunately, the sort of person who wills his body is also anxious to please the medical profession in the matter of an autopsy which, if performed, limits the usefulness of the body to the Department of Anatomy. Physicians need to be conscious of this conflict, and where the situation allows, to defer autopsy in such patients, or to perform a very limited examination without removal of organs or disruption of vasculature.

Most of us have had inquiries from patients about donating their bodies to medical science, and too few of us have a real appreciation of the truly pressing need or a positive answer in terms of practical procedure. Dr. Benjamin Spector has been doing a great deal to educate the profession and the public about these matters. His article on the willing of human bodies for anatomical science in the October 6, 1960 *New England Journal of Medicine* is most pertinent and is reassuringly backed by comment both editorial and appearing subsequently in the letters column. Some practical matters are worthy of restatement. Forms for recording such an intent are available from the Department of Anatomy of Harvard Medical School or from Dr. Benjamin Spector, Coordinator of Anatomical Material, 136 Harrison Avenue, Boston 11, Massachusetts. Conventional embalming as well as autopsy destroys a body's usefulness and the service of a funeral director is required only for the transport of the body to the Medical School. Transportation expenses will be paid by the Medical School where death occurs in Massachusetts. Unless the next of kin wishes otherwise, the Medical School will also bear the expense of interment with the appropriate religious ceremonies in a marked grave in Pine Hill Cemetery, jointly owned by the three medical schools in Boston.

Chapter 114 of the Massachusetts' statutes concerns cemeteries and burials. These laws appear to be concerned principally with the protection of the sanctity of cemeteries, the prevention of the concealment of murder, and the authorization of public health officials to control burial practices. Actually, the effect of the law is felt principally through the regulations of the board of health. While the law nowhere requires a funeral director, embalming, or a coffin, the economy-minded perpetrator of a do-it-yourself funeral will most likely be forced by the board of health to purchase all three before he is done, unless he starts preparing writs of *mandamus* several years before the death. In general this is quite properly in the interest of the public health, but the effect of such regulations sometimes misses the mark. For instance, the law requires that, except in cases of death from infectious disease, cremation not be performed before 48 hours after death. The law is apparently concerned about possible concealment of crime since they also require a certificate from the medical examiner during this period. The board of health, on the other hand, is almost certain to distrust modern refrigeration methods and insist that a body be embalmed if it is to remain above ground longer than 48 hours. The combined effect, while not displeasing to those selling embalming services, is frustrating to those who don't see the need of embalming before cremation. A certain amount of reappraisal and revision would seem to be in order in situations such as this. And in fact, a commission to study the laws relating to embalming and funeral directing has been authorized by the Massachusetts State Legislature. This commission is to make recommendations or proposals and report back to the Legislature not later than January, 1962.

The *Post* article does call attention to some dreadful wrongs and absurdities. For the most part, the article reflects a shortage of public information and calm consideration, and an excess of reaction on an emotional level. It does not seem appropriate here to fight fire with fire.

R. S. S.

OUR

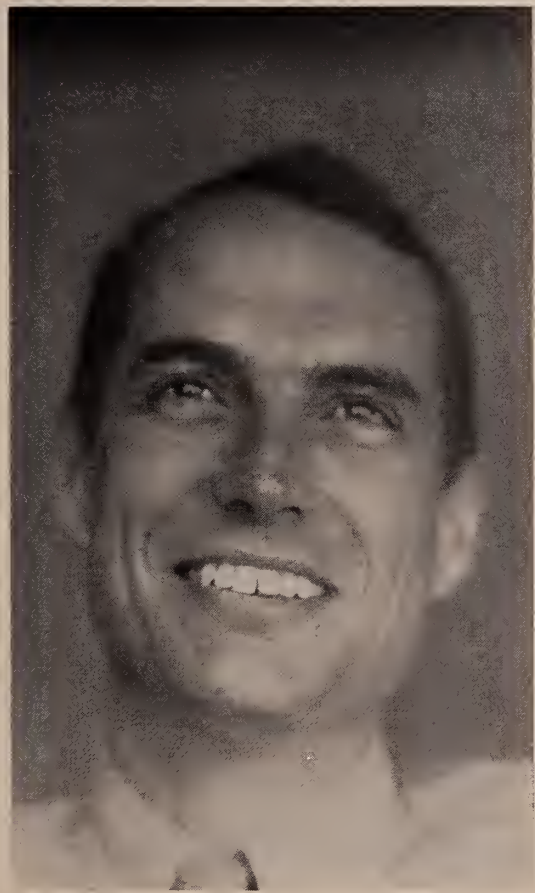


*Dr. Chan Dawson
examines a Taos
Indian. 10% to
20% of Navajo
and Pueblo Indi-
ans have trachoma*

"VANISHING" AMERICANS

John C. Cobb '48

The author, tanned by New Mexico sun.



I AM writing this as we sail south through the warm sun on the Red Sea, making our way toward Pakistan, where I expect to be with my family for at least two years. I feel that I now have a better perspective from which to write about the American Indian Health Program of the U.S. Public Health Service, with which I was associated for the last four years as Consultant in Maternal and Child Health in the states of New Mexico, Arizona, Utah, and Colorado.

FIRST, let me dispel some rather common misconceptions regarding our Southwestern Indians: They are certainly not the "vanishing Americans." In the ninety years since they were defeated by Kit Carson, the Navajo Tribe alone has increased from 8,000 to about ten times that number; this is more than twice the rate of increase of American Whites or Negroes in the same period.

Secondly, while a few Southwest Indians own private property and a very few have become wealthy from oil and other minerals, most of them live on reservations and are still relatively poor, even in comparison with the old Spanish-American villages in the same area. In the last five years, the Navajo tribe as a group has indeed netted over \$100 million from oil, gas, and uranium, with more to come. But if this had been divided up, it would have totalled scarcely two or three hundred dollars per person per year. Instead, the tribe has wisely invested the money in water development, education, welfare, community chapter houses, and other projects of value to the tribe as a whole.

Far from being "wards of the government," Indians are now beginning to realize their potential political influence. If they all voted together, for instance, the Indian vote could swing the elections in Arizona and New Mexico. The tribes realize this and are beginning to register and vote. They are employing outside experts in law, mining, agriculture, forestry, and even anthropology to help them formulate tribal policy.

In comparison with what I have seen in Pakistan and India, our American Indian Health Service in the Albuquerque Area stands out as being extravagant in its lavish provision of doctors, medical facilities, and drugs; but it is backward in important public-health services such as vaccination, maternity care, and family planning.

This backwardness is partly due to the serious shortage of public-health nurses for Indian Health work; but more basically, it results from deficiencies and narrow-minded attitudes of administrative and professional people in the U.S. Public Health Service, which until recently has blocked the employment of sub-professional personnel to carry out lagging programs. Pakistan and India are much more deficient in fully qualified public-health nurses, but they are ahead of us in effective utilization of vaccinators, midwives, and lady health visitors.

ADMINISTRATIVE PROBLEMS

Our American Indian Health Program costs more

than \$80 per capita per year for the approximately half million reservation Indians in the U.S. At this price it could and should be a first-class Program. If the program were run efficiently, non-Indians might justifiably complain that the Federal Government was showing preference and operating racially segregated institutions!

The recently completed, elegant 200-bed Indian Hospital in Gallup, New Mexico, is a case in point. Now, for the first time, Indians may have a medical facility far superior to anything available to non-Indians in that area. But whether or not it will be superior depends upon the Public Health Service's ability to get capable staffs who will stay there. This in turn will depend on the improvement of administrative practices in the Public Health Service. The greatest need is for a service-wide integration of the preventive health services with the curative hospital services. This dichotomy has until recently split the whole Indian Health Program, including the Washington Office.

The Public Health Service has only been responsible for American Indian Health since 1955, and since that time there has gradually emerged some sensible administrative planning. I refer in particular to a recent effort to develop Program Plans for the administrative service units (each of which comprises a Field Health Center or Hospital and ancillary Field Health Services.) These plans attempted to consider the major health needs of the Indians in each Unit and to develop Program Plans to integrate curative hospital services with preventive services, such as maternal and child health and immunization.

There is much to be desired in this respect, however. In the absence of competent senior physicians, a young doctor in the Indian Health Service is likely to become embittered by administrative incompetence and leave the Public Health Service, even though he may have seriously considered making a career of public health at the time he started. I have seen many such tragedies in the past four years. I feel very strongly that the PHS is missing an important opportunity to recruit and train young doctors.

In Indian Health especially, where cultural and administrative problems are unique in each assignment, a man should be encouraged to stay at the same post for five years if he does a good job; but he must also have regular contact with competent clinicians, regular support and help in administrative matters, and regular training opportunities amounting to about one month each year. During the four years I worked in the Albuquerque Area Office there were three different Area Medical Officers in charge of the whole program and there was a turnover each year of about 70% of the young medical officers in the hospitals and clinics.

MENTAL HEALTH PROBLEMS

The segregated Indian Boarding Schools, which have been constructed during the past half century, are often far from the homes of Indian children; this is partly in order to get the children away from reservation influ-





ences. Many of us have seen aspects of this program which have led us to want to know more about the psychological conflicts of these children, and how they can be helped toward better adjustment.

A young Field Medical Officer may have a population of 10,000 Indians to look after as well as another 3,000 children in the boarding schools. He may get to some schools only once or twice a year. He can hardly take time to consider mental health problems because he is so busy with infectious diseases. (In the schools of the Albuquerque Area, it is common to find as many as 30% of the Indian children with skin infections, 10% with trachoma, and 5% with chronic draining *otitis media*.)

In most Navajo boarding schools, there is no clinic, nor even any private examining room. The school health program is hardly more than a mass screening for the most prevalent diseases. Health records are not generally transferred when the child changes schools, so that follow-through on any treatment program is unlikely, and the past history of a child's problems is usually unobtainable. Part of my job was working to improve these deficiencies; we have begun to succeed in a few schools.

Some of us have found time to think about the mental health of the students. We have wondered whether the psychological conflicts of these school children may not be at the root of the over-all picture of general maladjustment among American Indians reflected in the high rates of juvenile delinquency, school dropouts, failures in college, alcoholism, and illegitimate children who are sometimes neglected to the point of starvation.

Any group in the process of rapid change is beset with fears of the loss of their cultural integrity. Psychological conflicts and uncertainties about adjustments are inevitable. Furthermore, the accelerated pace and new ways of life that come with industrialization bring psychological stresses and strains which are reflected in the heavy loads placed on psychiatric facilities in all industrialized countries. What can be done to forestall the millions of psychiatric tragedies that may come with the industrialization of newly developing countries?

The Indian Health program presents an elegant opportunity to seek ways of alleviating or preventing this "industrio-neurosis." As a beginning we held a workshop in Albuquerque in April, 1960, to consider these problems. Publication of the Workshop Proceedings has already led to plans for further study and much-needed improvements in the Boarding Schools. Perhaps these studies and reports may help other countries avert similar difficulties in newly developing educational programs.

Preliminary surveys of various undesirable hereditary conditions among a few Pueblo Indian Tribes have revealed frequencies up to ten and even one hundred times those found in the general population. (Some preliminary measurements have been made on the level of radioactivity in the vicinity of various Indian reservations and further detailed studies are under way.) The practice of marrying within the tribe undoubtedly explains

much of the high frequency of genetic anomalies in small Pueblo Indian tribes. Recently, intermarriage between tribes, and with other races, has become more frequent.

Overpopulation is a problem which has hardly been touched by public health workers in the U.S.A. where food has been plentiful. Every year carloads of surplus food products are distributed free to American Indians and others who cannot support themselves on their land because of drought, soil erosion and the like. Only in recent years has much work been done to develop new sources of water for the arid Southwest Indian reservations, where the birth rate is almost twice as high as that of the general population and where Public-Health efforts have brought the death rate down so that the population is now increasing at the rate of about 3% per year. Several of our Southwest Indian tribes face serious impoverishment if their population continues to grow without concomitant development of their food and water resources. Failure to meet this need may spell their doom.

CONCLUSION

In the U.S.A. there are ever-increasing pressures on government, on industry and on labor unions to provide health services for groups such as the aged, the indigent, the crippled and even the healthy. It is inevitable that Public-Health workers will be increasingly involved in diagnostic and curative, as well as preventive medical services. There are very few places in the U.S.A., however, which have administrative integration of Public-Health with medical-care programs. Indian reservations could serve as a training ground for such co-ordination.

If the PHS, or any other organization, wants to lead the way in public health, it should start by training groups of mature and well qualified physicians in the administration of comprehensive medical care. The Indian Health program is an ideal place to start such a program because it comprises both curative and preventive services. These men should be neither commissioned officers in the Public Health Service nor civil service employees, but rather should be incorporated into a long-term traineeship program, preferably under the auspices of a school of public health. After five or ten years in this program, they should be encouraged to enter the Public Health Service on a career basis or to seek employment in public or private prepaid medical care organizations. In this way, the PHS would gain a corps of men, both inside and outside the Service, who could make an outstanding contribution to the health of the public.

The re-establishment of the balance between population growth and resources poses one of the greatest, perhaps the greatest, world health problem today. It is for the purpose of investigation in this field that I have left the U.S. Public Health Service and rejoined the faculty of Johns Hopkins University. As Director of the Medical Social Research Project on Population for the Government of Pakistan working at the University of the Panjab, I hope to contribute to the understanding of a problem which may increase in scope in the future.



THE NUTSHELL MURDERS OF MRS. FRANCES LEE

A puffing four flights up in the Department of Legal Medicine, in a somber room, can be found one of H.M.S.'s most fascinating, yet unsung, permanent exhibits. In this room are seventeen "nutshell" models of unusual murders, each glass-encased, individually illuminated and accompanied by a brief description. These models, meticulously fashioned to scale (1 inch to 1 foot), are the gift of their creator, one Mrs. Frances Glessner Lee of Littleton, N. H.

H.M.S. owes a great deal to this remarkable woman, the only woman ever to be made an honorary New Hampshire State Police Captain. Heiress to an International Harvester fortune, Mrs. Lee became fascinated with crime and in 1946 presented the Medical School with the first ten models, and, far from incidentally, a gift of \$250,000 to start a Department of Legal Medicine at Harvard.

She is also responsible for the appearance biannually at H.M.S. of the 24 blue-suited, gold-badged individuals who suddenly turn up in the halls of Building A following signs to "Police Seminars." Mrs. Lee donated money to start a series of seminars open to hand-picked officers of any state police force in the country. Graduates of the seminar become

"Harvard Associates in Police Science," a high honor in police circles which has now been accorded some 600 members. Each policeman is assigned two glass nutshell cases to solve within two days, a task he accepts with a chuckle, but tackles with great respect. Mrs. Lee is usually present in the background ready to answer questions. All the clues are on the scene. These models are all composites of known and imaginary crimes; actual events have been altered so as to be unrecognizable and there are solutions to each miniature crime. Before the Seminar ends Mrs. Lee acts as hostess at a banquet for the police "students" which she personally plans with meticulous perfection — even to supervision of the cooks.

Mrs. Lee took up miniature-making as a girl. When her family invited a symphony orchestra to perform in their home, young Frances sketched the faces of orchestra members and later busied herself making exact scale models, including all the instruments. Although some of the members barked that they themselves were represented a bit too fat, or too bald, all agreed that everyone else was represented perfectly! Her talent was immediately recognized and she was launched on a unique career.

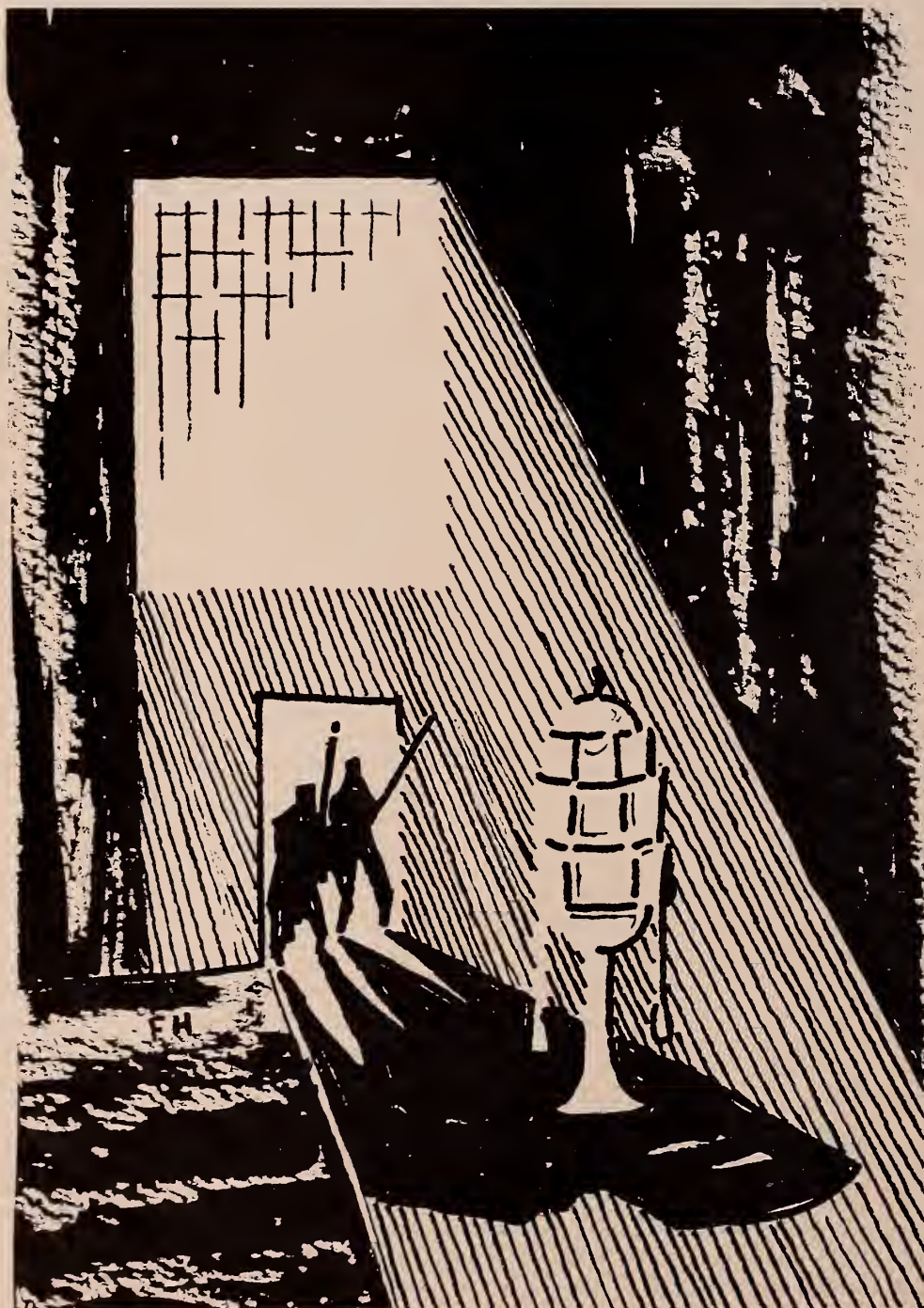
Mrs. Lee's interest in crime developed when she was ill and took to tuning in on local police calls for amusement. She was also a personal friend of Dr. George Burgess Magrath, a real-life counterpart of Sherlock Holmes who later became Professor of Legal Medicine at Harvard. Through him she became more specifically interested in legal medicine. Well acquainted with Dr. Magrath's most puzzling cases, she began to make scale models of them.

Her attention to detail has been likened to "that of the hungry hawk scanning a cover of brush." Each model is exact in detail down to the underwear on the figures which is handmade and fits! Windows and shades go up and down. To obtain properly worn material for a model's trousers, Mrs. Lee once wore a blue suit "a year after it was unfit."

Now in her early 80's, Captain Lee continues to act as a consultant to the New Hampshire State Police. They say she "cross-examines with the diabolical skill of a shrewd advocate, yet in a manner which is completely cherubic in its naive innocence." But, with magnifying glass, and dental tools, she devotes her principal energies to the pursuit of the hobby she began as a girl.

Georgia's First Physician

BY ALFRED A. WEINSTEIN '33



DRAWINGS BY
FRANCIS C. HERSEY, M.D.
Assistant in Psychiatry

EARLY in 1732 the British Crown granted 10,000 pounds sterling to "twenty-one trustees, noblemen, and gentlemen of Great Britain," and charged them with establishing a colony named Georgia. This, the last British colony to be founded on American soil, was to serve the head, the heart and the pocketbook of George II. It was intended as a buffer state for the protection of Charleston in the north from the Spanish at St. Augustine to the south; in addition, it was to be a convenient dumping ground for the English poor. Finally, Georgia was to become a source of raw materials for English industrialism.

Six months later, the medical history of Georgia began at Palace Court, London, where a certain "Dr. Cox, Surgeon" offered his professional services to the immigrants for one year "without fee or reward." His only stipulation was that the colonists build him a home and till his grant of fifty acres. However, history loses all trace of Dr. Cox after this, and the only hint of his fate is found in the record of a grant of land, "Garden number 52," made in Savannah in July of 1733 to "Frances, widow of Dr. Wm. Cox."

Strangely enough, medical help for this colony of Anglicans, when it finally came, was furnished by a Jew through the backwash of the Spanish Inquisition which began during the reign of Queen Isabella. Spanish and Portuguese Jews had been forced to make the choice between compulsory conversion to Catholicism or death by fire or torture. Those who could fled to more friendly lands, among these, the Netherlands, Curaçao, and the Recife in Brazil. Those trapped in Spain accepted death or conversion. Many of these Catholic Jews, or Maranos (pigs) as they were called, followed the precepts of their religion secretly, much as the early Christians did in the Roman period.

One of these crypto-Jews living in Lisbon in 1732 was Dr. Samuel Ribiero Nunez. Although he was a member of a distinguished family and a cultured physician, with an extensive practice in that city, he and his mother, his wife Rebecca and their two sons Daniel and Moses, his daughter Zipporah, and servant Shem Noah, were apprehended by the "Familiars of the Inquisition," during a Passover service, "while seeking the Lord according to their prohibited faith." Thrown into jail, they were tortured repeatedly and would soon have perished except for the intervention of the Grand Inquisitor, a long-time patient of the good doctor. The Catholic Ecclesiastical Council reluctantly agreed to release Dr. Nunez, so that he could treat the Grand Inquisitor, who was afflicted with a prostatic obstruction of the bladder. First, however, they made provisions for two officials of the Inquisition "to live with this family to prevent another relapse into heresy."

IN his mansion on the banks of the Tagus River, Dr. Nunez frequently entertained the first families of Portugal and of Europe. One evening, he was host to the captain of a British brigantine anchored in the River. When



the party was in full swing, the captain invited the guests and the Nunez family (accompanied by their Inquisition keepers) to visit his ship. As soon as they were on board, anchor was weighed, according to pre-arranged plan, sails unfurled, and the ship put out to sea and arrived safely in England. History does not disclose the fate of the ecclesiastical spies, or the natural history of the Grand Inquisitor's medical problems.

London Jews, who had been contributing liberally to the Oglethorpe scheme of providing homes for impoverished Christians in the new colony of Georgia, found it logical to provide transportation for their own poor. They chartered two boats and sent a total of ninety Jews to Savannah in one year. Sailing on the first of these boats were Dr. Nunez and family, and forty other Jews. They arrived in Savannah on July 11, 1733, six months after General James Oglethorpe and his first batch of colonists. After this boat landed, Captain Thomas Corain, one of Oglethorpe's aides, wrote, "Georgia will soon become a Jewish colony." He feared that if this news leaked out, rich Christians would not support the colony, and poor Christians would not settle there. The trustees urged Oglethorpe to remove them but, though he was annoyed by their arrival, he did not press for their departure. He knew that, in addition to the Scroll of Law, Hanukah Candelabrum, cult utensils, circumcision kit and Hebrew prayer books, these Jews also had a knowledge of agriculture acquired in Mediterranean lands. He wanted to use them as tools to create in Georgia a "Mediterranean colony of wine, olive oil, silk and indigo."

Dr. Nunez' arrival, however, was more than welcome since an uncontrolled epidemic of "bloody flux" and "malignant fever" was raging. Of the original one hundred and fourteen settlers, twenty-nine were already dead, while the survivors had hardly the strength to bury the victims in shallow graves. The formal remedies at his disposal were limited and were soon exhausted, but his training in botany helped make use of indigenous plants and with great success. He made extensive use of laudanum to control the "bloody flux," and lemon extract to treat the scurvy which appeared in debilitated patients. He used ipecacuanha empirically without knowing that it had a specific action on the amoeba histolytica. With infusions of cinchona bark he treated the "malignant fevers," considered in the medical texts of that period to originate from the evil night miasmas of the marshes (malaria = mal aria = bad air). When his supply of cinchona bark was exhausted, he used as substitutes the bark of white oak, red oak, and dogwood. He used tartar emetic to produce vomiting in patients with food poisoning, jimson weed smoked in a pipe for asthma, and sassafras root tea as a "purifier of blood."

The epidemic subsided, the colonists returned to their work, and Dr. Nunez built his home and settled his family. General Oglethorpe sent to the Trustees of the Colony a report of the help rendered by the first active practi-

tioner of medicine in Georgia. These gentlemen requested Oglethorpe to pay that humane physician for medical service he had rendered to the colonists. The accounts of the colony do not indicate that payment was ever offered or received.

Dr. Nunez did receive help from another Jew named Abraham de Lyon, who had accompanied him on the original contingent in 1733. De Lyon was a farmer who grew peas, grain and rice. He was also a viniculturist by training and succeeded in raising "beautiful, almost transparent grapes" in Savannah, from choice cuttings he brought with him from Portugal. He laid out a ten-acre tract as a Botanical Garden, and introduced to the colonists foreign plants with valuable medical properties and developed herbs which were native to Georgia.



Two years later Dr. Nunez met John Wesley, who arrived in Savannah with a commission from the Trustees appointing him to the office of "priest of the Church of England" to the Savannah mission. Wesley courted the society of this Sephardic Jew, but had no illusions about the ease with which he could be converted to Christianity. Pastor Bolzius, the leader of Salzburg Germans, and George Whitefield, another pioneer Methodist, had offered the Jews conversionist literature, which had been vigorously rejected. He exhibited a great interest in Dr. Nunez's medical practice, and discussed with him the conduct and care of his patients. Said John Wesley, the Methodist, "I began learning Spanish in order to converse with my Jewish parishioners, some of whom seem nearer the mind that was in Christ than many of those who call him Lord."

BEFORE Wesley had left England for his priestly mission in Georgia in 1735, he had made "anatomy and physics the diversion of his leisure hours." In Georgia, he met John Regnier, who was a male nurse among the Moravians, and assisted Regnier with the first autopsy in Georgia. The two men listed the causes of death as "a hematoma of the abdominal wall, *among other things*!" It was in Georgia that John Wesley became an active practitioner of bodily as well as spiritual healing among his parishioners, and on his return to England he organized the first free clinic "for the ill and the ailing."

The Trustees in England showed their interest in Dr. Nunez' work and sent him "casks of wine and packets of drugs" to be used in treating the colonists. With "two barrels containing twenty-three deer skins' weight of

Bears' oil" and several parcels of "sea pod, snake root, sassafras, china root, sumac and contra-yerva," Dr. Nunez opened the first pharmacy in Georgia to compound his medications from imported and native-grown herbs.

Dr. Nunez watched with apprehension while General Oglethorpe made a series of aggressive moves southward toward Spanish Florida from 1735 to 1740. First came the fortification of St. Simon's Island and then the establishment of the British Fort in Frederica. Finally came the preparations and the disastrous attack and unsuccessful siege of the Spanish Fort at St. Augustine. The beaten British troops brought news that the Spanish were preparing to invade Georgia. The Inquisition was still a reality to Dr. Nunez and his family. His aunt, Abigail de Lyon, who had recently died in Savannah, carried to her grave the marks of the ropes which had tied her to a rack in a Portugese dungeon. Dr. Nunez had given up an assured position of wealth and affluence in Lisbon to practice the faith of his Jewish forefathers. And he had no desire to expose his family and himself to the uncertain mercy of Spanish Inquisitors again.

Dr. Nunez paid his last visit to his patients, traveling by foot, horse and rowboat. He again assembled his family: his mother, his wife Rebecca, his two sons Daniel and Moses, his Portugese-born daughter, Zipporah, his Georgia-born daughter Esther and his personal servant Shem Noah, and set sail for Charleston, South Carolina. The Portuguese Inquisition had been responsible for the arrival in Georgia of Dr. Nunez, gentleman of letters, humane and skillful physician, the first active practitioner of medicine in this colony. The threat of the Spanish Inquisition was responsible for his departure from Georgia after he had helped sustain the colonists for seven long and arduous years.

ABOUT THE AUTHOR:

In his own words, "a lover of baked beans and cod-fish balls," Dr. Weinstein is a graduate both of Harvard College and Harvard Medical School. He completed his residency in Boston and, in 1938, entered private practice in Atlanta, Georgia. He also teaches surgery at Emory University. During World War II, he saw active duty in the Philippines and was wounded during the Bataan campaign. In 1944, he was taken prisoner and sent to Japan on a "hell ship" to take charge of a P.O.W. hospital in Shinagawa, Tokyo. Because of his demands for food and medicine for his patients, the Japanese sent him to a coolie labor camp for three and one half years, and he emerged weighing 105 pounds.

He is presently on the staffs of George Baptist, Spalding Pavilion and St. Joseph's Hospitals in Atlanta, and is director of the Spalding Pavilion for Registered Nurses. In addition to writing for a hobby, Dr. Weinstein's sculpture has appeared in exhibits at the Fogg Art Museum in Cambridge and the High Museum of Art in Atlanta.

WHEN the threat of Spanish invasion subsided, the family returned to Savannah. Dr. Nunez's name fades in the mist of history but his qualities carried on in his children. His son Moses became a man of wealth and distinction and a member of Oglethorpe's Masonic Lodge. He served as Indian interpreter and agent for the Georgia Revolutionary forces. In his will he divided his property equally between his children born in and out of wedlock.

Moses' great grandson, Commodore Uriah P. Levy, was one of the highest ranking naval officers of the Civil War, and it was primarily to his credit that corporal punishment in the U.S. Navy was abolished. He purchased Thomas Jefferson's home in Monticello when it was a disgraceful eyesore, recreated it, and, through his heirs, transferred it to the U.S. Government.

The good seed planted by Dr. Samuel Ribiero Nunez, urbane physician, distinguished man of the world, sturdy self-respecting Jew, matured into offspring who also loved mercy, did justly and clung tenaciously to their own interpretation of God.

BIOCHEMISTRY:

PERHAPS the most dramatic intellectual development of the twentieth century is the revolution presently taking place in biology. The history of science is marked by periods in which extraordinary advances are made in some particular area. Thus the framework of modern physics was developed in a period of remarkable achievement toward the close of the nineteenth century. Now biology is taking such giant strides forward that its progress is exciting interest and attention from scientists of every discipline. Indeed, many physicists have found the intellectual ferment of the new biology so exciting that they have changed the whole orientation of their research to participate in it.

Biochemistry has played a central role in the development of this new biology. For many years biochemists were preoccupied with problems of what might be called static biochemistry — the isolation and identification and analysis of substances from tissues. In 1913, however, in a prophetic speech to the British Association, Sir Frederick Gowland Hopkins declared:

“... my main thesis will be that in the study of intermediary processes of metabolism we have to deal not with complex substances which elude ordinary chemical methods, but with simple substances undergoing comprehensible reactions. I intend to emphasize the fact that it is not alone with the separation and identification of products from the animal that our present studies deal, but with the

About the Author:

In 1960, Dr. Kennedy succeeded Dr. A. Baird Hastings as Hamilton Kuhn Professor of Biological Chemistry and Head of the Department; Dr. Hastings held the posts from 1935 to 1958.

Dr. Kennedy received the Ph.D. in biological chemistry from the University of Chicago in 1949. In the same year, he began work with Dr. H. A. Barker as a postdoctoral fellow of the American Cancer Society. The following year he came to the Massachusetts General Hospital as a research assistant with Dr. Fritz Lipmann, to work on oxidative phosphorylation and the mechanism of action of thyroxine. Since 1951, he has been a member of the faculty at the University of Chicago. His research on pathways of fat metabolism in living things has had a great deal of influence on the field of biological chemistry. “In writing the article,” says Dr. Kennedy, “I have attempted to discuss developments in the Department and its aims in teaching in relation to the rapid advance of biochemistry.”



Top: Dr. Eugene P. Kennedy adjusts a silicic acid column used for the chromatographic isolation of lipids from enzyme systems; bottom: Dr. Manfred L. Karnovsky takes a melting point of a purified substance.

The Language of Modern Biology

reactions in the body, with the dynamic side of biochemical phenomena."

Biochemistry has become the language of modern biology. The pharmacologist, the microbiologist, the physiologist speak this language daily in their efforts to learn more about those aspects of the life process of special interest to their disciplines. This is not to assert any special dominance for biochemistry. Indeed, for her sister disciplines, biochemistry, like every other language, is simply a tool. Like other tools, it may in the future become outmoded, but at present its promise seems unbounded.

THE Department of Biological Chemistry of the Harvard Medical School, as might be expected from its tradition, is sharing vigorously in the upsurge of contemporary biochemistry. This is apparent not only from the activities of the group housed in Building C-2 on the Quadrangle, but also of those members of the Department whose laboratories are in the teaching hospitals associated with Harvard. So important has biochemistry become to medical research and to the practice of medicine that each hospital now maintains its own program of biochemical research. The system of joint appointments in the hospitals and in the Department of Biological Chemistry is one of the real sources of strength for the Department, since the interests, skills and achievements of these biochemists cover almost the whole range of the science.

GENES AND ENZYMES

Nowhere has the value of the chemical approach to biology been more brilliantly exemplified than in the field of genetics. The unit of heredity — the gene — has now been identified with a specific chemical substance in the cell — deoxyribonucleic acid. Complex as this substance is, it is susceptible to analysis by present-day biochemical and biophysical techniques. The day is not far off when the mysterious process of the transmission of hereditary characteristics will be known in specific chemical terms.

It is now realized that genes may act by controlling the pattern in the cell of specific protein catalysts — the enzymes. In this Department a study of the genetic factors controlling the structure and formation of enzymes in bacteria is presently being undertaken by Dr. Edmund C. C. Lin. The advantage of pursuing studies of this kind in bacteria with a short generation time and enormous cell population is quite obvious. Of special interest in Dr. Lin's work are experiments in which the genetic material of the cell (deoxyribonucleic acid) is altered by the treatment with certain chemicals. This results in the formation by the cell of altered enzyme proteins. A major goal of this work is to understand how the specific chemical alteration of the deoxyribonucleic

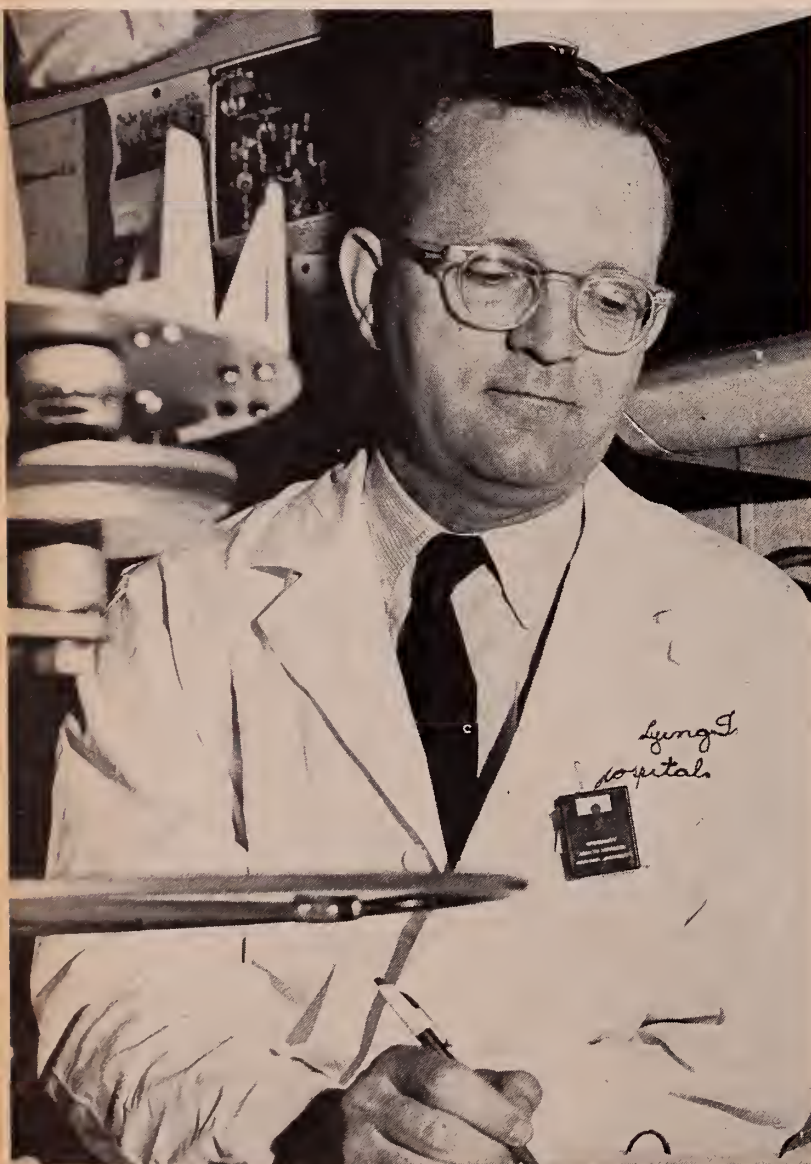
acid leads to a specific change in the structure of the enzyme protein which the cell produces.

Although the gene determines the *kind* of enzyme proteins which a cell can synthesize, the *amounts* of enzymes which are actually produced and the *rates* at which they are synthesized are factors which are controlled by multiple mechanisms — partly genetic and partly depending upon the cellular environment. Another group, headed by Dr. W. Eugene Knox, '43A, is investigating the ways in which the pattern of enzymes in animal tissues may be varied by the administration of certain metabolites or hormones to an animal. These workers were among the first to study adaptive enzyme changes of this kind in animal tissues. Two generalizations are emerging. First, the functional nature of the differentiated animal cell is not constant. Its pattern of enzyme activities is continuously altered by the concentration of the many chemical substances in its milieu. Secondly, the hereditary information contained in the gene, which is believed to determine the qualitative structure of an enzyme protein, is necessary but not sufficient to determine whether, when, or how much of an active enzyme protein will be made by a cell. The latter parameters are determined by the chemical environment of the cell.

The study of the pattern of control of certain enzymes concerned with the metabolism of amino acids has provided the opportunity for Dr. Knox and his associates to make critical observations about certain hereditary diseases of man which involve anomalies of amino acid metabolism. Alkaptonuria and phenylketonuria have been especially studied and it has been found possible to develop reasonable facsimiles of both of these diseases in laboratory animals for detailed investigations of the sort not possible in man.

Another approach to the general problem of the development of enzyme patterns in animal tissues has been taken by Dr. Cornelius F. Strittmatter, IV who has investigated the development of the segregation of enzyme activities in specific tissues during embryonic differentiation. The appearance of different and characteristic enzymic capacities in specific tissues or organs is an important aspect of the development and maturation of an animal. Dr. Strittmatter hopes to learn something of the factors responsible for the different expression in various tissues of the genetically determined potential for enzyme formation.

Enzymes are fascinating substances, not only because of the fundamental role they play in cell physiology, but because viewed simply as complex organic substances, they are catalysts of an extraordinary degree of specificity and activity. Techniques are now available to take an enzyme apart, building block by building block, and to



Top: Dr. Edmund Lin scoring bacterial mutants with an electronic colony counter; bottom: Dr. Claude A. Villee, Jr., calculates the results of an experiment on estrogen-requiring transhydrogenase.

learn a great deal about its chemical structure and configuration. This makes it possible to find the chemical mechanisms by which enzymes exert their extraordinary catalytic functions. An enzyme which catalyzes a step in the formation of purines (a group of substances found in nucleic acid) has been chosen by Dr. Standish C. Hartman for a detailed study along these lines. Dr. Hartman is working out methods for determining the region of the enzyme molecule directly involved in the catalytic process.

MECHANISM OF ACTION OF HORMONES

Much information is available about the chemical processes taking place in the human body. Comparatively little is known, however, of the controls which govern these reactions. A great deal is known about the chemistry of many hormones, which now can be prepared quite readily in a highly purified state, but almost nothing is known about how these substances exert their profound effects in man or in animals. Several members of the Department are attacking this problem from widely different angles.

Dr. Eric G. Ball and his collaborators are studying the effects of insulin on isolated tissues and enzyme systems. In addition to its well known effect on the reduction of the concentration of sugar in blood, and on other aspects of carbohydrate metabolism, insulin profoundly affects the metabolism of fats. It has recently been found in several laboratories that adipose tissue — long neglected and considered inert — is metabolically very active and is exquisitely responsive to the action of various hormones including insulin. Dr. Ball and his group have devised methods for measuring the effect of insulin on adipose tissue manometrically; that is by determining the balance between the uptake of gaseous oxygen and the release of carbon dioxide. The conversion of sugar to fat is accompanied by the release of carbon dioxide, and this process in adipose tissue, under certain physiological conditions, is greatly stimulated by insulin. Thus, the rate of release of carbon dioxide can be made a function of insulin concentration and the procedure can be adapted to the measurement of insulin in extremely low amounts. This assay technique has been applied to the study of insulin-like activity of the serum of men and animals and to the release of insulin-like material from tissues.

In collaboration with Dr. Russell Barnett, formerly a member of the Department of Anatomy at the Harvard Medical School, the effect of insulin on the structure of adipose tissue as revealed by the electron microscope has also been investigated. Insulin was found to produce pronounced morphological changes in the cell membranes of adipose tissue. These changes are characteristic of the process of pinocytosis — the uptake of fluid by cell — and may shed some light on an important effect of insulin, namely the stimulation of uptake of glucose by this tissue.

Dr. Claude A. Villee and his associates, working in the Boston Lying-In Hospital, are engaged in a long-term

study of the mode of action of another type of hormone, the steroid, particularly the estrogens. An exciting development which has emerged from this work is the discovery of an enzyme which requires estrogens for its activity. This enzyme, called a transhydrogenase, catalyzes an unusual reaction in which hydrogen is transferred from one niacin-containing coenzyme (DPN) to another (TPN). Although DPN and TPN are closely related in structure, the metabolic functions of the two coenzymes are profoundly different, since TPN in its reduced form is thought to play an essential role in key biosynthetic processes, while DPN is involved in energy-yielding oxidation reactions. The possibility thus arises that steroid hormones of the estrogen type function by specifically controlling the interconversion of these two coenzymes, thus controlling essential biosynthetic pathways. The interaction of steroid hormones, enzymes and pyridine nucleotides is, however, extraordinarily complex and Dr. Villee and his associates are now engaged in a detailed study of such interactions, using purified enzymes in model systems.

Dr. Dwain D. Hagerman, '50, whose laboratories are also located in the Boston Lying-In Hospital, is engaged in a study of the complex metabolic interrelationships between maternal and fetal tissues in the diabetic, pregnant animal. His results suggest that defects of carbohydrate metabolism observed in the fetus under such circumstances are primarily the result of the excessive amount of glucose present in the fetal blood, rather than a fundamental endocrine defect in the fetus itself. Since diabetes in the mother is a serious complication of pregnancy, the information gained in experiments of this kind may ultimately aid in improving the clinical treatment of this condition in human patients.

Dr. Lewis L. Engel and his collaborators at the Massachusetts General Hospital are interested in defining the role of the steroid hormones in normal and abnormal growth. It has long been known that certain tumors of the breast and of the prostate gland may be under hormonal control, a fact which illustrates both the potency of these substances and the importance to medicine of an adequate understanding of their mode of action.

Among the specific problems which Dr. Engel and his collaborators have been studying are those concerned with the mechanism of biosynthesis of steroid hormones. They have recently discovered in a human adrenal tumor a new pathway for the formation of the important adrenal cortical hormone, cortisol. This was accomplished by an ingenious use of a double labeling technique in which two potential precursors of cortisol were labeled with two different isotopes and the relative amounts of the two isotopes in the final product were determined. By this means it was found that more than half of the cortisol was formed by the newly discovered pathway.

This group has also been concerned with the interaction of steroid hormones and substances of biological importance, such as plasma proteins. This work was

carried out in collaboration with Dr. J. Lawrence Oncley, also of this Department, and has shed considerable light on the forms in which steroid hormones may be transported in plasma.

STUDIES IN BIOSYNTHESIS

A major concern of earlier generations of biochemists was the digestion, absorption and breakdown of food-stuffs in the body. Nothing was known of the ways in which the complicated constituents of the living cell were synthesized. It was not until the last decade or two that techniques became available to investigate the synthetic activity of the cell. Now, with the introduction of new methods, most notably the isotope tracer technique and new procedures for the separation and purification of substances in minute amounts by chromatography, it has become possible to work out the pathways for the synthesis of many complex substances in the body. At present, the biosynthesis of nearly every major class of body constituents is under active investigation.

The author's own laboratory has been concerned with the biosynthesis of lipids, especially phospholipids. The discovery in 1955 of a new type of cytidine-containing coenzyme which is specifically required for the biosynthesis of lecithin, a typical phospholipid, opened the way to the elucidation of a pattern of reactions which are now known to be involved in the biosynthesis, not only of lecithin but other phospholipids as well. In this and other laboratories throughout the world, a far-ranging program aimed at working out the interrelationships among the biosyntheses of all of the major classes of lipids is now under way.

Lipids are especially abundant in brain and nerve, being found for example in high concentration in the myelin sheath. It is probable that the process of myelination itself involves an ordered synthesis of these lipids together with a protein component. An understanding of the metabolism of the lipids may therefore cast some light on this process, and may also lead to a better understanding of the metabolic defects in demyelinating diseases.

Lipids are also essential constituents of membranes in intracellular structures, such as mitochondria, in every kind of living cell. However, despite a multiplicity of theories, very little is known about the function of lipid substances in these intracellular structures and membranes. It is possible that a study of the metabolism of lipids in a simpler kind of organism such as in bacteria might shed some light on this problem. A program of work has therefore been initiated on the biosynthesis of lipids in micro-organisms with the hope that what is learned about the function of lipids in these cells may also be applied to higher organisms.

THE METABOLIC BASIS OF PHYSIOLOGICAL FUNCTION

An understanding of the molecular basis of physiological activity has long been a goal of the biochemist.

Muscular contraction and the conduction of the nerve impulse, for example, are still far from completely understood in terms of the metabolic events underlying the physiological manifestation. In a rather unusual approach to this general problem, Dr. Manfred L. Karnovsky and his associates have been studying the phenomenon of phagocytosis, especially in the polymorphonuclear leucocyte of the guinea pig. These cells, when presented with foreign particles of certain types, will ingest them and in so doing undergo characteristic changes in metabolism. These include the chemical changes needed to provide the energy required to engulf the particles, and also include the processes of repair and regeneration which must take place as a rather large particle is conveyed from outside the cell to its interior. The regulatory mechanisms that govern these metabolic changes are of obvious importance. Dr. Karnovsky and his associates have found that the incorporation of certain labeled building blocks into specific lipids of the membrane is greatly stimulated during phagocytosis. These changes resemble those observed during secretion or transport in other types of cell. This in turn suggests that secretion, transport and phagocytosis are processes which are fundamentally similar, and that all involve an active metabolism of lipid components of the cell membrane.

BIOCHEMISTRY OF POLYSACCHARIDES

Research by Dr. Roger W. Jeanloz in the Lovett Memorial Laboratory at the Massachusetts General Hospital is centered on the determination of the chemical structure of complex carbohydrates — the polysaccharides. Some of these substances are implicated in the maintenance of the physical properties of tissues, such as connective tissue. Others have more specific biological activities. Derangements of the metabolism of these complex polysaccharides may be of importance in the pathogenesis of certain diseases, such as rheumatoid arthritis, in humans.

Studies of the metabolism and function of polysaccharides in the past have been greatly hindered by a lack of precise chemical information about their structure. In their work on this problem, Dr. Jeanloz and his collaborators have developed methods for the degradation of carbohydrate substances such as heparin and hyaluronic acid. Since many of the pure reference standards needed were not available, it was necessary to synthesize a series of them, which was in itself a formidable and challenging problem.

PHYSICAL CHEMISTRY OF PROTEINS

A program of research aimed at a deeper understanding of the fundamental physical chemistry of proteins is being carried out by Dr. J. Lawrence Oncley and his collaborators. This group has long been interested in the proteins of blood. The methods devised for the fractionation of plasma proteins by treatment with ethanol at low temperature by the late Dr. E. J. Cohn brought the

laboratory world-wide recognition. Work on the complex system responsible for the coagulation of the blood is an important part of the program of research of the laboratory at the present time. Other aspects include a study of the interaction of plasma proteins with other biologically important molecules and measurement of the magnitude and nature of the forces involved in certain intermolecular protein interactions. In the latter field, Dr. Margaret J. Hunter and Dr. Gordon L. Nordby have been studying the association and dissociation of insulin in acid solution. The factors which govern the association of insulin under these conditions are very complex, but it has been possible to develop a program for an electronic computer to unriddle some of the complexities of the data.

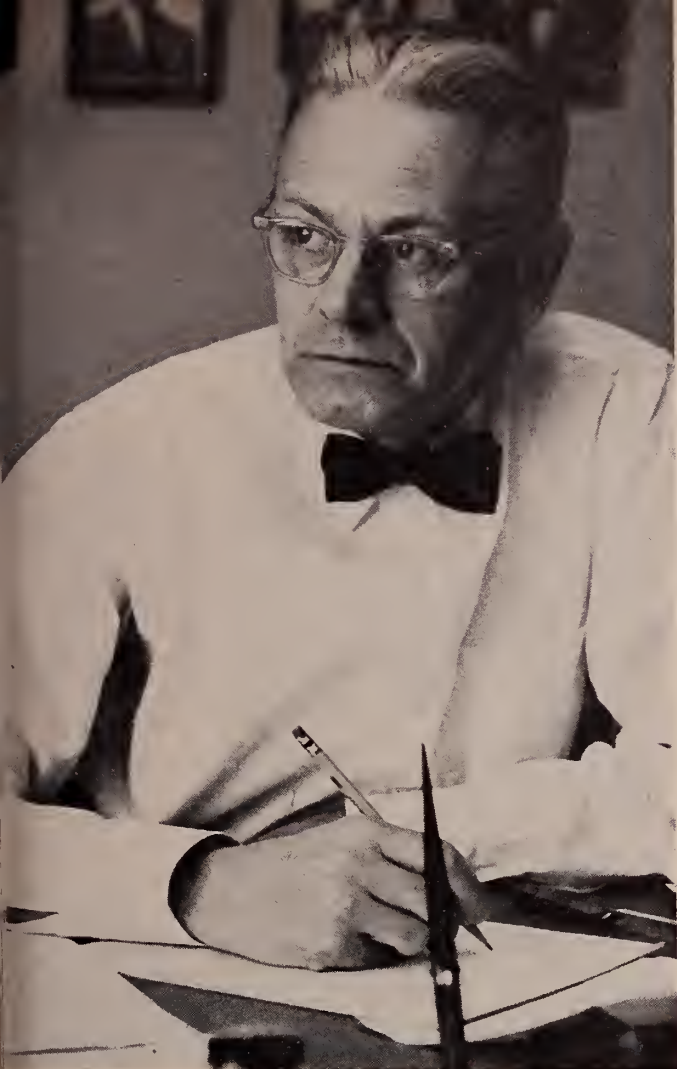
NEUROCHEMISTRY

Biochemical work on the metabolism and function of brain and nerve has a long and honorable tradition at the Harvard Medical School. The first Hamilton Kuhn Professor of Biological Chemistry, Dr. Otto Folin, was appointed biochemist at the McLean Hospital at the turn of the century, with the express assignment of studying the biochemical aspects of mental disease. Dr. Folin remained at the McLean Hospital for eight years, and after his departure biochemical research at the hospital was continued. This large and active laboratory is presently under the direction of Dr. Jordi Folch-Pi.

Two principal parallel lines of work in neurochemistry have been pursued at the McLean Hospital. The first of these is concerned with the isolation and identification of chemical constituents of nerve and brain and the study of their properties. The second is the correlation of the distribution of components in tissues with histological structures by the techniques of quantitative histochemistry. As the program has developed, the scope of the work has broadened to include investigations on the metabolism of brain and nerve, on biosynthesis, and finally, a study of the application of biophysics to neurochemistry. Possibly the main result of the biochemical work at the McLean Hospital to date has been the recognition of a number of macromolecular complexes. Among these are the proteolipids, which are a special kind of lipoproteins which appear to constitute a part of the myelin sheath, the phosphatidopeptides, and the macromolecular form of the gangliosides, known as strandin.

BIOCHEMISTRY AND MEDICINE

The teaching of biological chemistry to medical students is, of course, a central task of this Department. Simply because biochemistry has penetrated into every part of contemporary biology and because of the speed at which advances in this science are being made, the fundamental goals of the Department in the education of physicians must be kept constantly in mind. The biochemistry which was taught in medical schools in an earlier day was largely concerned with the analysis of



Top: Dr. Eric G. Ball, Professor of Biological Chemistry and Chairman of the Division of Medical Sciences; bottom: Dr. J. L. Oncley inserts a cell in the rotor of the Spinco Analytical Ultracentrifuge.

tissue constituents, principally blood and urine. Training of this kind was invaluable for a physician who might be called upon to carry out many of his own diagnostic tests in his own office or at the bedside, perhaps far removed from a clinical laboratory. The development of accurate methods of analysis was an important part of the research of the day and, as is always the case, the content of the courses in biochemistry tended to reflect the research interests of the professors to a considerable extent.

The relevance of this kind of training to the education of a physician at the present time must be seriously examined. The technical facilities now available to the physician have largely relieved him of the burden of analytical work. On the other hand, the number of chemical tests which may give meaningful information to the physician has multiplied. It is much more important that the physician of the present day have an adequate understanding of the basic principles underlying the application of chemistry to diagnosis, and above all that he have the insight to evaluate critically the meaning of the results of the tests which he has ordered. For these reasons the emphasis in our teaching of biochemistry to medical students is no longer directed solely towards clinical biochemistry. Clinical chemistry cannot be neglected, but it is becoming more and more essential to provide the student of medicine with the appreciation of the integrated chemical processes which are part of the fabric of life, rather than simply burdening him with the details of isolated chemical reactions or analyses which in practice he may never be called upon to do.

Everyone would agree that the impact of biochemistry during the last few decades on medicine has been dramatic. To cite only a few obvious examples, the contributions of the biochemist to an understanding of the role of vitamins in nutrition, to the development of the chemistry of acid-base balance, and to the whole field of endocrinology have done much to shape the modern practice of medicine. However, it may be asked what is the practical application of the more theoretical, cellular, dynamic biochemistry of the kind we have been discussing here. It must be confessed that there is as yet no practical application. Why then is it necessary for the future physician to be informed about the properties of isolated enzymes, about the chemistry of nucleic acids, about the properties of coenzymes, etc.? The answer, of course, is that the whole history of science teaches us that knowledge is the first step to control. Modern biology is well on its way towards gaining an intimate understanding of nearly every major function of the living cell. Control of many of these functions will certainly follow. The ever-growing body of fundamental knowledge which the basic biological sciences are accumulating will open the way to a new kind of medicine in which biochemical theory will play a central part. The leaders of the medical profession of tomorrow will be precisely those who will be able to discern the relevance of this new knowledge to the practice of medicine.



Emelia H., oil.

ART SHOW

AT THE
MASSACHUSETTS
MENTAL HEALTH CENTER

NOW in its third year, the annual spring exhibit of paintings from the occupational therapy department at the Massachusetts Mental Health Center (formerly the Boston Psychopathic Hospital) is presented in the main lobby facing Fenwood Road. The quality of the work bespeaks both the heightened emphasis placed on this program, and the artists' sensitivity of expression.

*Robert G., oil. The patient's
first experience in art has been through
occupational therapy at the M.M.H.C.*

Below: Paul S., oil.

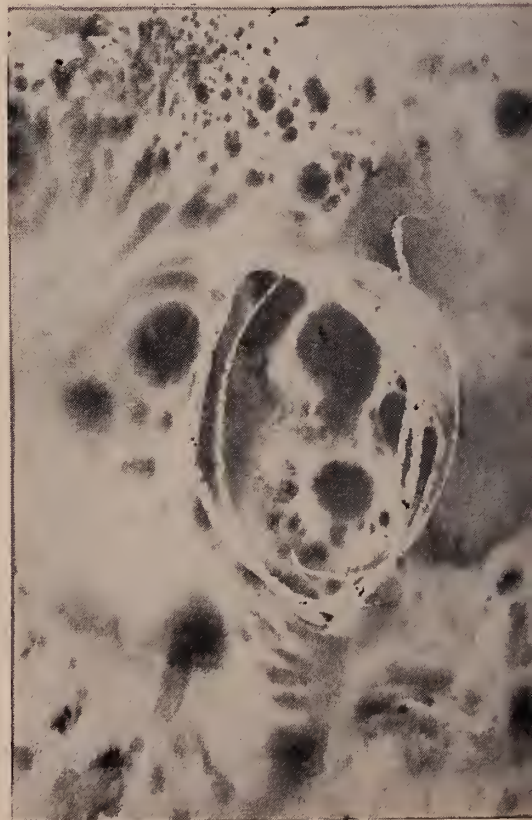




*Right: Ruth C., charcoal drawing.
The patient, who sold this
picture for \$25.00, has developed
her ability almost solely at
the Hospital. She has
now opened her own art shop.*

*William J., watercolor.
In greens and blues, this abstract
was done by a nine-year-old boy.*

*Claudia B., fingerpainting.
This abstract, in shades of pink, was
done by an eight-year-old girl.*







John Tenniel

One of the less decorous dining clubs

CLUB life at Harvard Medical School having been disposed of in the spring *Bulletin* of 1958, and the "Boylston Birthday" in the most recent issue, it has been suggested that the cheery semisocial and mutual improvement medical dining clubs of Boston be tidied up before more serious diagnoses are deferred.

Of the small groups for promulgating medical information that first flourished in the last century, the Boston Society for Medical Improvement comes to mind as probably the oldest and certainly one of the three

most distinguished — there were others similarly designated in Roxbury and Cambridge. Organized in 1803 by the ubiquitous J. Collins Warren and James Jackson, in 1805 it formed the nucleus, according to Burrage's History of the Massachusetts Medical Society, of the Boston Medical Library. It endured for six years before passing into a thirty-year state of suspended animation from which it was revived and incorporated by John Ware, Jacob Bigelow and Enoch Hale.

The Society had no doubt many important medical improvements re-

corded in its annals; prominent among them were Holmes's convictions regarding "The Contagiousness of Puerperal Fever," revealed to the members in 1843 and published in April of that year in the short-lived *New England Quarterly Journal of Medicine and Surgery*. Unfortunately, the Society improved the mind rather than the mortal frame; it was not a dining club, and having no place in its ritual for the absorption of physical pabulum it eventually expired, possibly for that reason.

One cannot fail to be increasingly impressed with the part that food

plays in the continuance of life and its enjoyment, even if the specialists in nutrition have so whittled away at the proximate principles as to leave nothing that can safely be eaten but spinach, parched corn and beefsteak, and damn little of that, as the mate of the whaler *Mozambique* so eloquently expressed it.

Doctors are sociable and they also require nourishment. Their attitude toward both sociability and alimentation is rather poignantly expressed in a short verse published in the *Boston Medical and Surgical Journal* a century ago. Entitled "A Card Left on a Doctor's Door, on His Going Out to Tea," it concludes:

No farther seek him till tomorrow's
dawn,
Let him, uncalled, a casual feast
attend
(Where he awhile from troubling
care has gone),
The supper of a neighbor and a
friend.

Any contest for priority of establishment among those medical dining clubs of which the writer wots would be between the Roxbury Society for Medical Improvement and Medical Reading Club and the Dorchester Medical Club, the honors apparently going to the former. Both continue in active operation and dedication to the gustatory art.

The Roxbury Society was founded in the spring of 1866 and was incorporated in the following year by Benjamin Cotting, Zabdiel B. Adams, George J. Arnold and others "for the purpose of improvement in the different branches of Medical Science, etc." Its incorporation was objected to by one member of the Legislature on the ground that it was a Club made up to avoid the Prohibitory Temperance Law. Another objected because it was a "Stock Company"

seeking to make money out of the community by irregular transactions.

Justice prevailed, however, as has long been the single aim of the Great and General Court of Massachusetts, and the constitution was granted, "regular meetings to be holden quarterly." Dining together was not one of the early prerequisites of the Society; the date on which its members first practiced the mutual ingestion of foodstuffs is buried in its archives in the vault of the Boston Medical Library. At least it is known that on June 23, 1906, the fortieth anniversary was celebrated with a dinner at the Squantum Inn in a thick fog — essentially meteorological.

The Dorchester Medical Club was founded on July 25, 1866, at the house in Downer Court of Dr. Charles Elbery Stedman, "founder and promoter of the Club, First secretary, artist and friend of all its members." Eleven physicians were "present or represented." At the third meeting, in September, an annual assessment of \$5.00 was imposed, and in January, 1868, the date of meetings was established for the Thursday of the month nearest the full moon.

The Kappa Pi Eta Dinner Club, known also as the Grub Club, came into being in the fall of 1871, according to a semisesquicentennial report prepared in 1946 by the late Henry A. Christian. Still in existence, it is suspected of having originated with 8 graduates of the Harvard Medical School who had pleasantly foregathered as fellow students in Vienna. The Club has perpetuated itself through an unvarying roster of 12 members, sustained in their fellowship by regular applications of "food, wine and pleasant conversation, with no formal program."

The R.C.R.C., or Roxbury Clinical Record Club, originated late in the last century. Its beginning was so informal that, despite its name, no clin-

ical or other record exists of the exact date or circumstance of its birth. However, both Dr. Elliott P. Joslin and the late Dr. Joseph H. Pratt, whose memberships dated respectively from 1900 and 1901, averred that the group had been meeting for some years previous to their own admission. Meetings were held for a time at the members' homes on the first Tuesday of each month, but after the membership limit was established at 40, dinners came to be held at the University and Harvard clubs.

No more complete dissertation on medical dining clubs than the foregoing could be offered without a greater expenditure of research time than the combined staff of the *Bulletin* has seemed ready to give to the matter. The defunct Bigelow Club has not been mentioned nor have the still existent Medical Exchange and Peristalsis clubs, or those that combine medicine and the other arts and sciences, such as the Vanderbilt Hall Dinner Club, strongly cross-fertilized by a number of the M. I. T. intelligentsia.

Every medical generation, too, has its contemporaneous dining groups that flourish while the need for them lasts, and then pass gently into unrecorded oblivion. Like the sturdier examples that have been listed they are not secret societies but nevertheless are entitled not to have their privacy too deeply invaded. Such are the Cheese and Sardine Club, which existed from 1927 until the War of 1941, and the unique "Churchwardens," a group of gourmets of the same period that dined regularly and well for over thirty years. Generally uninvolved in ecclesiastical matters it yet included in its scrupulous protocol a toast to the Archbishop of Canterbury, the smoking of gradually abbreviated churchwarden pipes, and the avoidance of technical medical discussions.

DICHTUNG UND WAHRHEIT

Goethe as Biologist

S. Ralph Himmelhoch, '61



THOUGH aspiring to be a painter, the young Johann Wolfgang Goethe first won fame as the passionate *Sturm und Drang* writer of the novel, *Die Leiden des jungen Werther*. This story was believed by the older generation of the day to have caused the epidemic of romantic suicides which spread like a brushfire through Europe on the heels of its publication. Goethe regained respectability with middle-age, however, when he simultaneously shouldered much of the burden of government in his adopted state of Saxony-Weimar and produced many of the lyric poems, plays, novels, epics, and essays which firmly established him as the greatest man of German letters. When Goethe reached an age at which present-day society would certainly have forced him to retire, he was still writing productively and publicly filling the role of poet-sage while privately pursuing his amorous proclivities with undiminished vigor. The monumental though incomplete remains of his correspondence (over 7000 personal letters) and his several autobiographical works pay further tribute to the rich though often tragic personal life which lay behind the glittering public image.

How humbling it is, then, to realize that Goethe's career as a natural scientist, particularly as a biologist, was distinguished enough that, had he never accomplished any of these things, it would have equalled or surpassed the achievement of most specialists in the field. This is yet more remarkable when one considers the somewhat devious route by which he made his entrance into the scientific community.

Scientific instruction was given short shrift in eighteenth century education. Goethe, like other children of his day, played with "electricity machines," burned leaves with magnifying glasses, and was amazed by the wonders of magnetism. Yet he received no formal scientific instruction as a child, in any subject other than mathematics. Perhaps his father's attempt to raise silkworms served as an introduction to natural history, but if it did, the odor which the poet remembered so vividly many decades later arising when the silkworms were struck down by a plague must have been a discouragement from further experimentation that took some courage to overcome.

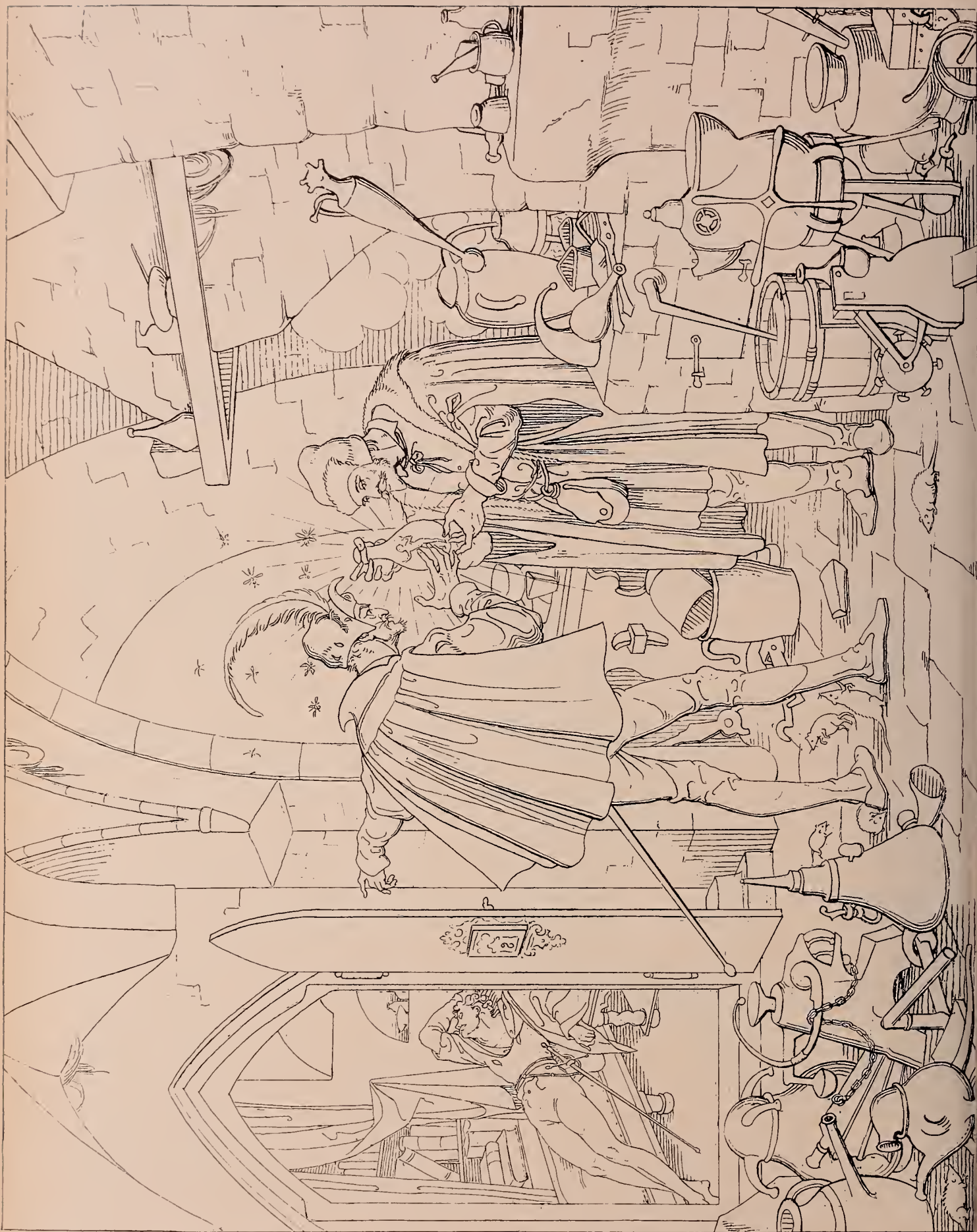
Medicine was the magnet which drew Goethe to scientific study. After two years of unhappy indecision at the University of Leipzig where he was supposed to be studying law, Goethe became desperately ill and returned home to Frankfurt am Main to recover. He was cared for largely by one Dr. Metz, a pietistic physician who drew most of his pharmacopoeia from the *cabala*, and who, in particular, possessed the secret of "... that one important salt, which could only be used in the most dangerous circumstances and was the topic of much conversation among the faithful, even though no one had ever seen it or felt its effect. In order to arouse and strengthen belief in the possibility of such a panacea, (Dr. Metz) had recommended certain mystical chemical-alchemical

books to any slightly receptive patient wherein they could, through diligent study, succeed in discovering this precious jewel for themselves." After the pattern which such quackery has followed through the ages, the patients were further informed that faith in the efficacy of the medicine was as important in producing a cure as the medicine itself. Half in an attempt to satisfy his mother's deeply religious friend Katharina von Klettenberg that he was giving the medicine a fair chance, and half seriously, Goethe began to study the alchemical works which the good Dr. Metz had recommended, and "... It took but a slight stimulus to inoculate me with this new disease." He began to devour the writings of Paracelsus, von Welling, van Helmont, and Basilus Valentinus, and:

Hardly had I regained a little health, and was enabled by the more clement season to return to my attic room, than I began to prepare a little apparatus; I made a vent furnace with a sand-bath and learned very quickly to transform the glass flasks into bowls in which various mixtures could be cooked. The special ingredients of the Macrocosmos and Microcosmos were now poured in, in a wonderfully mysterious way to bring forth the mean salt. But what occupied me for a long while was the so-called *Liquor Silicum* which arises when pure quartz is mixed with the proper amount of alkali, whereby a transparent glass is produced which melts to a beautiful clear fluid on exposure to air. Who-soever has prepared this himself, and seen it with his own eyes, could hardly blame those who believe in a Virgin Earth and think themselves able to proceed even further through it.

Goethe fortunately recovered from both of his diseases almost simultaneously. Traces of this venture remain, however, in the wondrous magical-alchemical world of *Faust* and in the *Wahlverwandtschaften*. To the less Germanic reader, they are equally clear in the tortuous philosophical arguments of some of Goethe's scientific prose.

Though many who are intimate with the medical profession might find it difficult to believe, Goethe's interest in scientific work was next kindled by the dinner-table conversation of students of medicine. "These, as is well known," he wrote, "are the only students who entertain themselves, even after their lectures, by speaking of their science and profession. This lies in the nature of the profession. . . . Medicine occupies the whole man because it is occupied with the whole man." While at Strasbourg, presumably studying law, he was so taken by the fame of the medical faculty and the enthusiasm of the students that he dropped his legal studies and instead attended lectures on chemistry and anatomy. Though this may seem a peculiar form of masochism to some, it should be remembered that the hours spent watching dissections were undoubtedly sweetened by the frequent trips to Sesenheim and Fredrike Brion.



← *Wagner concocts Homunculus in Faust II: this was a derivative of Goethe's early interest in alchemy. Illustration by Moritz Retzsch.*

Goethe's encounter with Spinoza's philosophy, mediated at first by the writings of Giordano Bruno, placed the keystone in this irregular educational arch. When considering the contribution of Spinoza to Goethe's philosophy it is always well to bear in mind Goethe's later confession that he found it difficult to separate what he had read out of Spinoza from what he had read into Spinoza. It was from Spinoza's work that Goethe derived the concept of unity in nature. Nature is, according to Goethe's derived dictum, ". . . das Ewig Eine,/Das sich vielfach offenbart." What appears to man as diversity is only apparent diversity. In fact, all the varied forms of life are but modified expressions of the same underlying principles. Man has his place in the animal kingdom just as do other species and can claim no special distinction. From Spinoza was also derived the belief in the importance of "process," of which the object is but the dead housing.

"Will man was lebendiges erkennen und beschreiben,
Sucht erst den Geist herauszutreiben,
Dann hält er die Teile in seiner Hand,
Fehlt leider nur das geistige Band."

The role of biological science, in other words, is the study of the living process, its goal the discovery of the fundamental unity of life.

SEVERAL years passed after Goethe left Strasbourg before his interest in anatomical studies was renewed. Two apparently completely disconnected interests were ultimately responsible for his return. It will be remembered that Goethe's original ambition was to become a painter, and though he learned through the years that his talent along these lines was severely limited, his interest in art remained unflagged. In the great tradition of the Italian Renaissance, the study of anatomy was intimately associated with the study of art, and was considered a necessary part of the education of all artists. Consequently, when Goethe undertook to establish the school for artists at Jena as part of his governmental duties, the necessity for instruction in anatomy was taken for granted. In 1778 Justus Christian Loder was appointed professor of medicine at Jena and was expected to perform the three-fold duties of museum curator, instructor of medical students, and instructor of Goethe, who, in turn, would instruct the students in the school of art. With the arrival of Loder at Jena, Goethe gained a friend who not only taught him more anatomy, but who also stood by him when other professional anatomists vehemently disputed his anatomical discoveries.

Another official function led Goethe even more obliquely, but just as surely, back to the study of anatomy,

and was the particular stimulus to his comparative studies. In Karl August's little duchy, financial problems were as important as they are in all states. One of Goethe's tasks as a minister of state was to put the metal-ore mine at Ilmenau back on a paying basis. One of the practical problems of the miners was to keep the mine diggings in the ore-bearing strata of the earth. In the days before proper equipment had made geological study possible at more than a primitive level, the identification of the particular stratum in which digging was proceeding was difficult. One method was to identify the type of fossil remains in the rock which was being removed. But this important practical problem required a knowledge of osteology and zoological classification which did not exist at that time or which, at most, was the only partially achieved goal of active research. Thus Goethe was aroused to interest in the study of fossil remains by a quite mundane engineering problem. With his customary curiosity, he soon converted this interest to a more strictly scientific and purely intellectual one.

FROM the standpoint of the history of science, Goethe entered a controversy before it had really begun. It will be remembered that the burning argument in biological science in the years immediately before the publication of *The Origin of Species* (twenty-seven years after Goethe's death) concerned man's place in or out of the animal kingdom. Even schemes which purported to explain the origin of species before Darwin's book, left man, the specially created, to the side. It was still intellectual heresy in any Judeo-Christian thinker to question the creation in seven days, the special creation of man, or the existence of all of the other species from the beginning.

To Goethe, these contentions were philosophically and factually untenable, and his first scientific project undertook the attack of one of the official bastions of the belief that man was not a proper member of the animal kingdom. Over a period of three years, he studied human skulls in various stages of development from fetus to adult. In addition he compared these with the skulls of numerous species of animals, made available either through the indefatigable hunters of Karl August's court or by the indefatigable efforts of Loder and others in the Jena museum of natural history. In early 1784 he wrote to his famous friend Herder: "According to the manner of the *Evangelii*, I must quickly inform you of what I have found — neither gold nor silver, but something rather which gives me unspeakable joy — the *os intermaxillare* in the human."

Why, one might ask, should it have seemed so significant to Goethe to have discovered this tiny little bone? Two reasons, one personal, and one scientific, are apparent. This little discovery convinced Goethe that it was possible for an amateur to make a significant contribution to an area in which professionals had worked and been mistaken. As such, it was a tremendous stimulus for him to continue his work. But more important, by far, was the

fact that official opinion had held that the absence of this bone in the human was the best scientific evidence for the special creation of man, for a position of the human race outside of the rest of nature. By implication, the discovery that man did in fact have an intermaxillary bone placed him firmly back in the animal kingdom where Goethe believed, on philosophical grounds, he belonged. Moreover, the careful comparison of this bone in the human with that in other species led to an additional observation, namely, that the morphology of the part stands, in nature, in close relationship to its functional role in the whole organism. In fact, the word "morphology" received its modern sense in Goethe's anatomical writings.

The reception which Goethe's discovery met in professional circles was bitterly disappointing. He had his paper meticulously translated into classical Latin (which marked him from the outset as an amateur) and sent it to three eminent anatomists of his day: Sömmerring, Blumenbach, and Camper (known to present-day medical students as the discoverer of Camper's *fascia*). Camper gave the paper close attention. He studied material similar to that which Goethe had used. He confirmed the existence of the intermaxillary bone in the walrus where Goethe had contended against the prevailing opinion that it existed; but he concluded his letter in reply with the stinging words: "*L'os intermaxillaire n'existe pas dans l'homme.*" Sömmerring's reply was less extensive and less polite.

Vicq d'Azyr, the professional anatomist, discovered the human intermaxillary bone, independent of Goethe. Rejection of his discovery by his colleagues was but another scientific difference which time would iron out. To Goethe, the amateur, on the other hand, rejection demonstrated how dangerous it was "to contradict the guildmasters, or what is even more foolish to think of convincing them." It must be said in Goethe's defense that not only was his discovery scientifically accurate in every detail, but that it played a significant if minor role in clearing the intellectual atmosphere for the later work of Darwin and others. Nevertheless he was clearly hypersensitive to disagreement, and his emotional reaction was to stand him in very poor stead in later years when, in his dispute with Newtonian physics, he was entirely incorrect. He, no more than Camper, could abandon an opinion which, however attractive to his philosophical beliefs, was clearly put in error by the evidence at hand.

GOETHE began his botanical studies at about the same time that he began his zoological work. Upon his arrival at Weimar, he found himself for the first time in a rural environment where the study of botany was possible. In addition, his ministerial duties included the management of the great Thuringian forest, and again, the practical problem aroused the theoretical interest. His first step was to consume Linné's treatises, and from them he gained much, so much in fact that he was later to say that the three men who had been most important in his intel-



In hand drawings of human and ape skulls used by Goethe, the human "intermaxillary bone," his cherished discovery, may be faintly discerned back of the incisors on the underside of the palate.



lectual development were Shakespeare, Spinoza, and Linné. However, with his customary taste for paradox, he also was fond of saying that though he learned much from Linné, none of what he learned was botany.

The primary difference between Linné's approach to botany and Goethe's was a philosophical one. Linné was the great classifier, the great finder of differences. Goethe felt himself to be the synthesizer, the great finder of similarities. Linné loved the diversity in nature which Goethe felt obscured the fundamental unity lying behind.

In essence, what Goethe sought was to discover the *Typus* of which all plants could be considered derivatives. This he called the *Urpflanze* or primordial plant and he felt that its existence followed logically from the existence of plants as entities distinguishable from the other natural forms. His botanical observations, extending from 1781 through the Italian journey, were always concerned with this fundamental problem, which transcended in Goethe's mind even the search for further understanding of the metamorphosis of plants, a search which professional botanists have felt to be Goethe's most important contribution to botany. Even though he thought in Sicily that he was on the verge of discovering the *Urpflanze*, this was to remain a botanical *Liquor Silicum* which dissolved into nothing on exposure to air. But empty in itself, it led directly to the second mainspring of Goethe's botanical thought, namely, the metamorphosis of plants, a theory which brings clearly into relief the differences between the minds of Goethe and Linné.

Linné had methodically separated and classified the numerous organs of the flower-bearing plants, holding these as immutably separate parts of the plant. In order to justify this he had to postulate the preformation of the whole plant in the seed, an idea prevalent at that time in animal embryology also. Goethe felt that the doctrine of preformation was unfactual and by the observation of plant development and the application of comparative principles which had stood him in good stead in his animal studies, arrived at the conclusion that the various different organs were simply metamorphosed leaves. By this means the principle of plant development was discovered, the doctrine of preformation avoided, and the emphasis in botanical thought shifted to new ground. Agnes Arber, the distinguished British botanist, recently called the little treatise in which these ideas were first presented a "minor classic in botany."

Goethe described one botanical "experiment" which is of particular interest to the medical profession and which is little known. While studying certain moulds, he noted down that he had prepared crude extracts of some stone moulds which had proved to inhibit the growth of infusoria. To my knowledge, the next written mention of the phenomenon of antibiosis was found by Florey and Chain some 150 years later in the notebooks of Alexander Fleming and resulted in the discovery of penicillin.

THE remaining important contribution of Goethe to biology is undoubtedly the one which had the most impact on the science of its day. During his second visit to Venice, Goethe retired to the Jewish cemetery to continue some literary work which he had under way. As he sat, however, a sheep-skull lying on the ground continually occupied his thoughts and it occurred to him that the idea of metamorphosis was applicable to animal organization as well as to the plant world. Long before, he had recognized the similarities between the occipital portion of the human skull and the cervical vertebrae. Now, in the skull of the sheep, he thought that he discerned such a similarity in the facial bones of the skull also. On this basis he conceived a theory in which the cranial vertebrae metamorphosed into the skull. He communicated this theory to personal friends, but since he found its scientific demonstration too arduous for him, he demurred from publishing it at first. When Lorenz Oken, then professor of anatomy at Jena, published a similar theory blown up into a "bone philosophy" several years later, Goethe was prevailed upon by his friends to claim priority. He did so in a paper published in 1827, five years before his death.

This theory was widely accepted in scientific circles for many years, even though Goethe himself was never wholly convinced of its correctness. Despite this wide currency of his idea, Goethe would no doubt have regretted his publication of it if he had lived to hear the brilliant repudiation delivered by Thomas Henry Huxley in his famous Croonian Lecture of 1858. However, the hypothesis itself was in the best modern biological tradition and had Goethe adhered to his original resolve not to publish, someone else would have had to present this or a similar possibility before anatomy could have moved on to the next stage in its development.

These, in barest outline, were the major biological interests, experiments, and theories of a man whose primary interest and accomplishment lay in entirely different areas. It is all very well to argue as some have that they did not rock the very foundations of the scientific world or change the future course of biological thought radically, and it would certainly be overenthusiastic to argue with Ernst Hæckel, the German evolutionary polemicist, that Goethe "discovered evolution"; but then Darwin did not write *Faust*, and one might search for some man of lesser stature as a scientist than the most important figure in the history of biology with whom to compare an amateur biologist. Surely Goethe's accomplishment was as distinguished as that of his friend Dr. Loder, or his arch-enemy Dr. Oken, yet these men were considered eminent scientists of their day. One might approximate the truth by stating that Goethe's scientific career was that of a distinguished professor of biology, and as such it may serve to remind us that the restrictions which we place on our own curiosity are in large part indications not of the times in which we live, but of the kind of people that we are.

ETHICS



MORALITY

in International Affairs

Ralph J. Bunche

UNDER-SECRETARY FOR SPECIAL POLITICAL AFFAIRS

UNITED NATIONS SECRETARIAT



David Lawlor

THE undergraduate George Washington Gay Lecture was intended by its founder as a distinguished discourse on medical ethics and business practice. In recent years, however, the Gay Lecture has become something of a big-name lecture at H.M.S. and has attracted professions outside the medical. Ben Ames (*Leave Her to Heaven*) Williams; Erich (*Psychoanalysis and Religion*) Fromm; Felix (*Felix Frankfurter Reminisces*) Frankfurter; Margaret (*Coming of Age in Samoa*) Mead are but a few of the famous speakers within recent years. No one held it against Dr. Bunche when he dismissed medical ethics with a few sentences and spoke on a subject he knows intimately: the United Nations today.

DR. BUNCHE, who holds both the Ph.D. and an honorary degree from Harvard University, belongs to the strictly non-partisan Secretariat of the U.N. He has had a wide career in teaching and diplomacy; in 1948-49 he won international acclaim as the U.N. mediator for his brilliant efforts in settling the Palestine dispute. The speech has been shortened for publication in the *Bulletin*.

IF the quality of ethics and the state of morality are at a low level in contemporary international relations, it is also true that the relations among states in their dealings with one another have never attained a high moral plane, although lofty principles are widely heralded. It may be that the present poor quality of international affairs is an inevitable consequence of that modern innovation of warfare, the Cold War. At any rate it is true to a shocking degree that even in the moves and counter-moves of the Cold War, truth and justice, along with reason and often courtesy and common decency, are generally, and quite cynically, rejected.

THE United Nations, not always successfully, has sought to avoid the Cold War, or at least to dull its cutting edges. Fundamental to its purpose is the development of a world order based on law and serving the ends of justice. We in the U.N. are not accustomed to think of absolutes, of pure justice, of blacks and whites and no greys. As a matter of course we look to conciliation and to compromise and we seek always the best justice possible. For the U.N. there is no perfect justice, no positive cure. This has been true in our experience with the major problems of the times: the conflict situations in Palestine, in Kashmir, in Suez and now, in the Congo.

Since much of the business of international affairs takes the form of negotiation, the individual as well as his government must be reckoned with, and factors of protocol and face-saving weigh heavily. Personal temperament is included. I think back to one of the experiences I had on the island of Rhodes in '49. We were in the midst of some very delicate and decisive negotiations leading to the first armistice agreement between Israel and Egypt and we were having a map session, working on borders. The military people in the room were using heavy drawing pencils to mark the lines on the map. One of the members of the Israeli delegation, an officer, who has since followed in the footsteps of his father and become a great archeologist, at one point lost his temper. In a quick flare-up, he snapped his pencil away. It flew out of his hand and, of course, as fate determines these things, the charge of the pencil went directly to the chest of the Arab officer who was sitting opposite. The Arab officer thereupon jumped from the table in great anger and left the room, saying that he had not come to Rhodes to have things thrown at him by the Israelis! He was, he said, accustomed to being shot at on the battlefield and, indeed, had been wounded, but he didn't expect to get this sort of treatment in the negotiation room. The conference threatened to break up. For a while, the armistice agreement hinged on that pencil. It happened, however, that the Israeli was a reasonable man, and his anger cooled. I talked with him and explained to him the implications of this incident. He took things into his own hands, and fortunately, he could speak Arabic very fluently. He went up to the Arab officer's room, knocked on his door, and

apologized to him in Arabic. We were able to get the discussion started again next day.

In the practice of diplomacy there is sometimes more concern for protocol than for ethics. But I take no harsh view of man in the international community. I offer no indictments. There is good as well as bad in international life — compassion to match callousness; generosity to offset greed; honesty as well as duplicity.

The U.N. never gives up on its patient, mankind, and it never will. The U.N. cares profoundly and expresses its concern for man in an unending vigil in his behalf, to save him from his follies. I have no intention here to beat the foreboding drum for I have never been a pessimist and am not now despite my recognition of the dangers in today's world scene. I believe that the U.N., however often imperfectly, will succeed in its historic mission and that the ultimate and suicidal madness of all-out wars, nuclear and bacteriological, will be averted.

The seizure of the U.N. since last July, however, with the stubborn crises in the Congo has brought the most serious threat to the survival of the organization in the 45 years of its existence. This is not because of the intensity of political division in the Congo issue, nor because of the financial crises created by the cost of the vast operation in the heart of Africa. (When I say "tremendous cost," I speak in U.N. terms, bearing in mind that the annual budget of the U.N. for peace work by no means approaches the annual budget of Harvard University!) The real threat was found in a tendency toward a far-reaching moral decay within the U.N. itself.

IN the years ahead the world's most serious challenges are likely to emanate from Africa and the sincerity and virility of the principles of democracy will be sternly judged in application there. What promise do they hold for the black and brown peoples of that continent? The beliefs of Christianity are likewise severely on trial. Can the African be truly accepted as a brother, while so many of his ethnic cousins still have not been similarly accepted? And what of the extensive Christian missionary work on that continent? The missionaries have been either too neutral in face of the political aspirations of the people on which there could be no neutrality or too inclined to identify with the spirit if not the paternalism of colonial rule.

Foremost perhaps is the challenge to our understanding of Africa. Although Europeans have been in Africa for some 300 years, they have come in significant numbers to relatively few places, such as South Africa and Algeria. Scarcely more than a decade ago, there were not more than four million Europeans on the entire continent including the Union of South Africa, yet they were, with the support of their home governments in Europe, ruling all of Africa with the exception of Ethiopia and Liberia.

It has only very recently become clear that the 235 million peoples and their countries in Africa are so rapidly emerging into independence, that they are bound to have an ever greater voice in and influence on world affairs, on peace, and on human progress. We must therefore learn as much as possible about this continent, which we a few years ago erroneously associated with steaming jungles, wild animals, cannibals, and Tarzan. I think it no exaggeration to say that the hope and the quest for world peace could be lost in and about the continent of Africa.

The U.N. and the General Assembly agendas in recent years have been increasingly dominated by a great variety of African problems. Modern war has found many of its roots in colonialism and the African continent is still the strongest bastion of that unhappy institution which John Foster Dulles once denounced in the following strong words: "The old colonial system should be done away with. It is obsolete and has never had justification in the past and it certainly has none in the future. It has borne some very evil fruit, primarily in that it has put people of one race to rule over those of another, which has been very bad for both races. I cannot find words to express myself sufficiently strongly in my belief that the system must come to an end and be liquidated in a prompt and orderly way."

Africa and colonialism have been virtually synonymous for a century. Here the U.N., since its beginning, has given serious attention to colonialism and the transition from colonialism to independence. One remarkable moral record of our times, perhaps the most significant, is the fact that 800 million non-self-governing peoples existed at the end of World War II, and that the number of non-self-governing people in the world today, has been reduced, in less than a score of years, to 100 million.

THE U.N. started out in 1946 with 51 members. Only three of them were African: Ethiopia, Liberia, and the Union of South Africa. The U.N. today has 99 member states and the African bloc now constitutes 25, not including the Union of South Africa! Last year, 1960, was Africa's year in the U.N., with 16 new African states. Membership in the U.N. in the next five years is likely to reach 120 independent states, *and most of these additional member states will come from Africa.*

The question in everyone's mind now is, are all of these new African states ready for independence? The answer, of course, is no, by no means! They're not ready, but who is to say when they would be ready? How many Western states, including our own country, really were ready for independence at the time they achieved it? It took a struggle for independence to begin our national unity and it took many years after independence to forge

that unity securely, and to develop within our shores an effective national government.

It should be noted that there is in the world community today a new sense of obligation toward the newly independent and the under-developed. This is in part, but only in part, an expression of a new international conscience, of a new international spirit of humanitarianism. In other part it is, of course, dictated by hard-headed self-interest, since, as the experience of the Congo has confirmed, serious trouble in a newly independent country today rapidly involves the world. The principle of multi-lateral technical assistance is firmly rooted. But unfortunately we still do not have aid without strings, aid with the pure purpose of helping the new countries help themselves, aid without political connotations or obligations of any kind.

LAST fall the U.N. was startled by the demand from the Union of Soviet Socialist Republics for a change in the position of the Secretary General from a single executive to a plural or tri-partite executive, representing the capitalist, communist, and so-called neutralist blocs (no one has yet been able to define the last). This was accompanied by table pounding heard round the world. It is my view that these attacks on the U.N. should not be related to the Congo problem except as to their timing. They are fundamental expressions of rejection of the notion that the U.N., in addition to its function as a world forum, needs the authority to intervene in threatening situations on the spot. With a triple-headed executive, really an executive monstrosity, such operations would be hamstrung and impossible in any practical sense, since the daily decisions imperative to action could never be agreed to quickly enough by all three executives.

This is the moral decay I spoke of earlier; and I believe there is a good deal more behind this move. It includes a negation of the very concept of an international career service which is objective, neutral, and non-political. On the contrary it would have members of the U.N. Secretariat, to which I belong, reflecting and serving the interests of their individual governments. Although there has been much talk about changing the form of the U.N. Executive office, since last September, the idea has clearly won little or no support and it has never been put to the test by its supporters by the submission of a resolution.

The Congo has given the U.N. its most severe test in its entire 15 years of existence, both politically and financially. It is the U.N.'s most elaborate case history and most frustrating single case. The country has been suffering from a multiplicity of ailments including something close to anarchy and the doctor, the U.N., has been driven almost to distraction. There now may be a turn for the better but we have our fingers crossed. The experience of this hapless country exposes the tragedy which may befall

a colony suddenly trying to shoulder the responsibilities of independence without preparation.

Why has the Congo been such a tragic contrast to the transitions to independence of the other new African states? Several main factors make the Congo relatively unique (fortunately) in Africa. First has been the incredible lack of preparation for independence. In a population of over 14 million people there were on Independence Day, last June 30, only *seventeen* men who had university educations! There was not a single Congolese doctor, dentist, lawyer or professional man of any kind. There was not one administrator, nor anyone who could qualify as an engineer or professor.

Why this complete lack of political and administrative experience amongst the Congolese? They had not been permitted to develop any. Last summer, when we set up U.N. offices in Leopoldville, members of the Congolese Government's Cabinet came to our office to ask for the privilege of merely sitting in for two or three days to learn what one does in an office, how one answers a memorandum, deals with visitors, replies to a letter, indeed, takes care of the phone calls. I have sat in cabinet meetings presided over by Mr. Lumumba as Prime Minister. Whenever the phone rang, he would interrupt the meeting, jump up and answer it himself and then come back and resume the business. Every few minutes he would repeat this performance. A trained Congolese secretary just didn't exist!

The second weakness was the built-in friction and division on Independence Day, not only the conflict between Mr. Lumumba and Mr. Kasavubu but in the lack of national unity. There were tribal conflicts and secessionist ambitions — and not only in Katanga. And there were the personal conflicts, struggles amongst the political leaders. There was also the mutiny of the "Force Publique," the Congolese national army: twenty-five thousand heavily armed, well-trained men, one week after independence, threw off their Belgian officers, mutinied and demanded to serve under African officers. Since Africans were by this time in all the high political positions of the country, this was understandable. The mutiny, however, threw the country into turmoil.

FOLLOWING the mutiny there was the near breakdown of courts, tax, police, customs, and political authority. The U.N. has been trying to deal with this situation ever since. The operation in the Congo has been in existence now for ten months. It is the largest mission ever undertaken by the U.N. Over 300 civilians are involved and about 19,000 officers and men from 28 different countries. This is unique in the history of international organization and effort. The U.N. sought to give meaning to the independence of a new African country by responding to its appeal to help it restore law and order

and to get the Belgian troops out of its cities and bases. The appeal has elicited the most generous response that the world has ever seen. But the U.N. is in the Congo only in the interest of international peace and must scrupulously avoid getting involved in internal political affairs that would almost surely lead to fatal consequences. This has been a difficult task. The Congolese army has repeatedly opposed the U.N. force that is the only threat to its license; and probably some members of this army are among the best paid troops in the world today. Privates are getting about \$100 per month and other benefits. After a brief meeting in a nearby town not long ago the army in Leopoldville got a 300-per-cent raise overnight, simply by demanding it.

THE U.N. operation in the Congo has been, from the beginning, a determined struggle to save the country from utter chaos and ruin. It has been the most striking manifestation yet of the international community's good will to assist those in critical need. Technicians have carried on work in the Congo in spite of conditions of great personal insecurity. They have kept communications going, the schools functioning. They have prevented outbreaks of epidemics. They have run the hospitals, organized training programs, promoted agriculture, combatted cattle disease, and given many other forms of assistance and advice to both central and provincial authorities. A highly successful training course for senior government employees has attracted 330 participants, while a school for law and administration in the Congo recently opened with 165 students. Training courses have been instituted for police commissioners, customs inspectors, postal administrators and others. University fellowships have been awarded to a substantial number of Congolese for training abroad in medicine, meteorology, and radio administration. To check unemployment, U.S. public works have been operating in most of the provinces.

I should perhaps stress the assistance the U.N. has given to the Congo through the World Health Organization. There was a mass departure last July of most of the 761 doctors who formed the backbone of the medical services of the Congo. Out of the estimated 150 doctors who remained after the mutiny of the army, the majority were in the capital cities of the provinces. Moreover, most para-medical personnel, such as sanitarians, x-ray, and laboratory technicians, left the country, with the exception of the nuns. As nurses, the nuns formed, with medical assistants, the only trained personnel in many of the hospitals.

WHO stepped into this situation to provide personnel to reactivate the main medical establishments, and to help the government in the preparation of a permanent public health service under trained Congolese technicians.

With no trained Congolese medical personnel available it was immediately necessary to bring into the Congo a substantial number of French-speaking doctors and technicians. Red Cross societies responded quickly to the Secretary General's appeal and a few governments also sent medical teams. At the request of the Congo government, the U.N. agreed to provide 130 medical technicians for one year: doctors, surgeons, biochemists, sanitarians, laboratory technicians, radiographers, etc. The Red Cross societies were asked to prolong their assistance for another six months, until the end of June, 1961. But as political disturbances spread progressively over the country, the placement of medical personnel became more and more difficult.

At present, apart from a few localities in Leopoldville province, assignment of U.N. medical technicians is in the main towns where U.N. troops are located and training of Congolese at all levels is under way. Seven young Congolese were sent to France and Switzerland in 1960 for a seven-year course in medicine. Of about 160 Congolese medical assistants, 61 have been sent to five French universities for complementary studies, leading to the status of fully qualified medical doctors, with all expenses paid by the U.N. One Congolese fellow is studying medical entomology in France. Twenty others are to study abroad in medical techniques and the administration of hospitals. Next fall 20 more medical assistants will go to Europe for study in medicine.

THE U.N. medical personnel in the Congo have had to demonstrate patience, understanding and even physical courage. They have had some rather unusual experiences. In Kasai province, a Red Cross doctor was arrested while bathing in a river and charged with spying. This Australian doctor took it philosophically, got himself released and promptly returned to his work. Two Red Cross doctors from Pakistan, on their way to Leopoldville to fetch supplies, were arrested by Congolese soldiers and badly beaten. They finally received the apologies of a high-ranking officer who explained that it was only a mistake and they returned to their assignments. A pharmacist, bringing drugs to Buniac in Eastern Province, had to leave in a hurry although he quite sincerely emphasized to local authorities that his medical mission was not trying to steal the good climate of Buniac to sell it to the enemies of the Congo! The grave famine in South Kasai last winter where some 300,000 tribesmen, uprooted by a genocidal tribal war, began to die at the rate of about 200 daily, required a massive relief effort by the U.N. It created serious medical problems, with the deficiency disease, kwashiorkor, widely prevalent. The situation at its worst in December and January revealed desperate conditions in the hospitals. One hospital, with 200 beds, was housing more than 1,000 starving patients. To

meet this situation tents were flown in from Kenya and an Austrian army medical team was sent in to take charge. Thanks to international assistance, the medical picture in South Kasai at the end of April was greatly changed, with the hospitals in fact half empty, wards well cared for, patients comfortable, and very few cases of severe kwashiorkor.

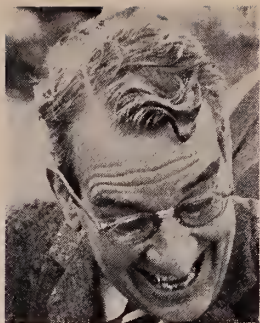
It cannot be questioned that the U.N. operation in the Congo has served to limit foreign intervention and thereby to avert the outbreak of a Korean or Spanish-type civil war in mid-Africa. Only the presence of the U.N. has prevented large-scale foreign military intervention, and thereby preserved the peace, not only of the Congo, but of the African Continent and, perhaps, of the world.

FINALLY, one cannot speak of Africa today or of the world for that matter, without reference to the acute and profoundly moral problem of relations among the races in multi-racial societies. The sore spots in Africa will continue to be in those territories where there are race relations problems, that is, where there are non-African settlements as in Algeria, Kenya, the Rhodesias, Angola and the Union of South Africa. There is no encouraging evidence, I am sorry to say, that these multi-racial societies, white and non-white, have advanced very far on any basis other than one of special privilege for the non-African. This is manifestly wrong and cannot endure. The sobering question is: can racial strife, even all-out racial war, be averted in Africa? I believe that there is still time left to work things out, but not very much of it. The tide of world opinion runs strongly against racial discrimination, and the U.N. stands firm for human rights and dignity. Equality and human dignity are international issues. The non-white two-thirds of the people of the world — the yellow and brown and black peoples — are all vitally concerned with them. All of the non-white peoples properly insist on their right to traverse the highways of the world with their heads held high. For this sort of problem of human relations in our own country or elsewhere there is but one remedy: equality through complete elimination of discrimination. And this is a problem each individual can do more about in the long run, I suspect, than governments.

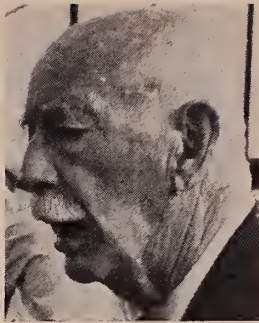
The attitudes of individuals toward each other are at the root of most of the world's war problems, in the sense that it is in the minds and hearts of individuals that international conflicts are spawned. The lethal viruses of hate and suspicion which afflict the world can be isolated and controlled only by relentless world-wide attacks in which every individual becomes a moral practitioner.



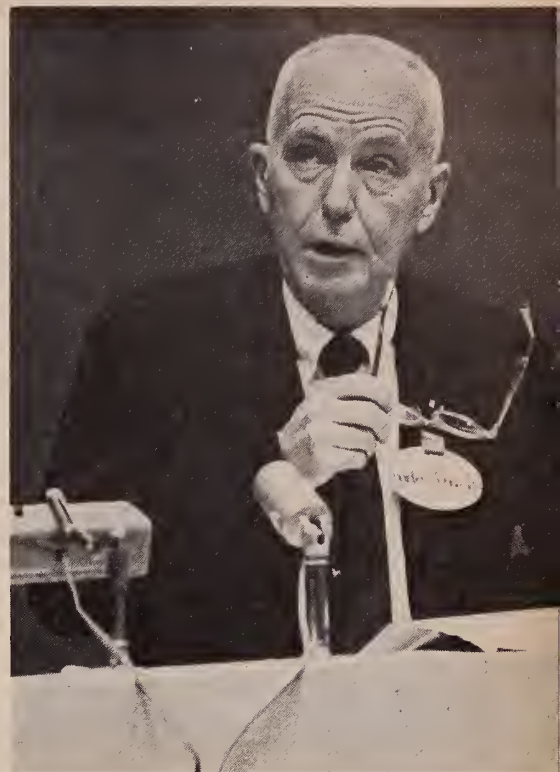
Lewis '26



Sturgis '31



Ayer '07

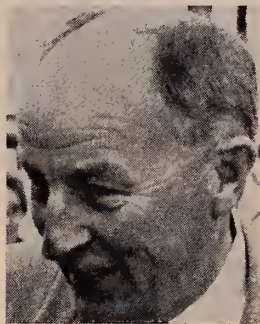


Huggins '24

ALUMNI DAY



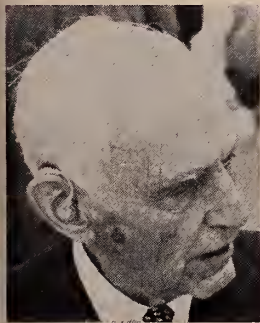
Ciani '31



Gunderson '26



Whitten '36



Ladd '06



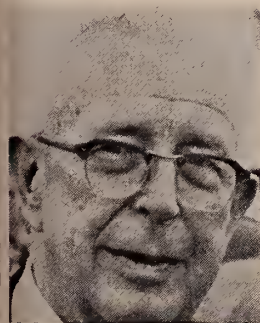
Sweet '36



Macomber '09



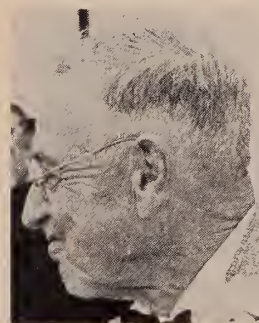
Federman '53



Cochran '11



Catlin '36



Macomber '09

Photographs by William Tobey



Unfolding drama



His wife's umbrella

"3-way stretch"

1926



Wetbacks



Alumni Day and Class Day

LION RAMPANT

The hodge-podge of symbolism which sometimes sits uncomfortably in American pageantry was this year rather splendidly redeemed by a huge new rampant lion, sewn onto a white background and overshadowing the portrait of Hippocrates in Amphitheatre D. The new escutcheon features prominently the lion taken from the Warren coat of arms in 1932 for the first Harvard Medical School seal.

President of the Alumni Association Charles B. Huggins '24 completing his year in office, declared his feelings for the post as somewhat akin to those of the famous ichthyologist and President of Stanford University, Wilbur K. Jordan. When asked why, in his first year as president, he had known all the students' names whereas by his fourth year he knew none, Jordan replied, "I have found that every time I remember the name of a student, I forget the name of a fish!" Notwithstanding his own forgotten fish, Dr. Huggins expressed warm appreciation for the experiences and friendships made during his year of the presidency. The Chicago cancer investigator, Director of the Ben May Laboratory, cited the advantages of Reunions: They are, he said, "educational and tax exempt; they offer free lectures and luncheon and, finally, there are the clambakes and fellowship." Most of all, he felt it to be a proud and happy privilege to be able to support Harvard Medical School.

TOM LANMAN

Dr. Huggins gave a short talk on Thomas H. Lanman '16, Director of Alumni Relations, who died on March 25. An unexpected treat was the showing of slides — photographs of Dr. Lanman taken at various periods of his life. Dr. Lanman, a master of the short speech, must at some point during the two days have been remembered for this rare virtue, even by those who knew him least. Those who knew him better may have been grateful for inclement weather which distracted somewhat from consciousness of his absence.

SYMPOSIUM

Council elections, tributes and bows duly completed, the morning Symposium got under way with topics of more than usual technicality. The most technical subjects, however, were delivered with wit and clarity; one factor which lightened the burden was the speakers' strong leaning toward food and sex.

23 SKIDDOO (AND XY TOO)

The formally all-male audience may have been intrigued by the discovery, reported by Daniel D. Federman

'53, of the "XXX" type known popularly as the "super female," and by the ability of the Y chromosome, even when stunted, to impose male characteristics over as many as four Xes!

Noting that abnormalities are by no means confined to the sex chromosomes, he mentioned "probably the most garish anomaly, triploidy, in which the patient instead of the modal number 46 has 69 chromosomes and is characterized by many congenital anomalies including flat nose, retracted chin, mental deficiency, cleft palate and harelip." An interesting connection of the 21st chromosome with mongolism and leukemia was suggested. Mongolism had been consistently associated with three chromosomes instead of two in the 21st pair. Patients with chronic myelogenous leukemia had also shown consistent abnormality of chromosome 21. Finally, mongoloid children themselves have not only an increased incidence of acute leukemia but, when non-leukemic, are characterized by morphologic abnormality of the polymorphonuclear leukocytes. "This whole field," he concluded, "seemingly focusing on the bizarre, may have its real significance in what it teaches about the normal."

HEPCATS IN SPACE

A plea for manned space flights was the gist of Dr. Clark Randt's "Man in Space" talk. Formerly of N.A.S.A., now of Western Reserve (no initials), Dr. Randt made an unemotional appeal for the emotional appeal of manned space flights. Many congressional leaders, and even presidential advisors, in advocating automated space exploration, have demanded that we "disassociate the realm of the intellect from that of the emotions." In favor of manned exploration himself, Dr. Randt said, "The feats of men will ever be the most potent inspiration stimulating our youth to heights of accomplishment."

Back to the depths, as Moderator Howard Ulfelder announced a downpour in progress outside the Amphitheatre. The festivities, which had begun in weather neither fair nor foul, were thus launched on a wet two days, not all, but much of it in the spirit of Gerard Manley Hopkins:

"What would the world be, once bereft
of wet and of wildness? Let them be left,
O let them be left, wildness and wet . . ."

Reunion reports were shorter, gayer, and full of stylistic confidence, and few but the caterers seemed to mind the ever-wildering weather.

A "BALANCED" DIET

Edward Ahrens of the Rockefeller Institute spoke on one of life's greatest pleasures, food. "The Lieberman-

Burchard test for measurement of cholesterol, he said, has been with us for many decades and as a result, cholesterol has dominated our thinking for many years." Suggesting that other substances had been shown to affect serum lipid levels, Dr. Ahrens described the rare phenomenon of carbohydrate-induced lipemia. "We believe," he said, that this lipemia is an exaggerated form of the normal biochemical process by which carbohydrates are rapidly converted to fats. We anticipate that, as we extend these studies, we will find higher triglyceride levels in all people when they eat diets richer in carbohydrates." Stressing that the total number of calories consumed was probably more important in determining serum lipid levels, Dr. Ahrens concluded: "I have discussed both triglycerides and cholesterol levels because none of us can yet be certain what part serum lipids play in atherogenesis. Nor do we know that cholesterol levels are any more important than triglycerides in this hypothetical train of events. It remains to be proven whether Lieberman and Burchard dragged a blue-green herring across the triglyceride trail."

THE "HUMAN" RACE

Back to the sexes again, as a revered and warmly familiar presence, John Rock '18 told first of his work in inducing fertility and then of the new oral contraceptive pills. "Perhaps," he said, "you have recently heard of a comparatively new contraceptive, 'the pill' (possibly the one prophesied by President Conant), which offers what is appropriately called a 'natural method of birth control.' Of course, the term is not a new one. It has been rather fancifully used as a euphemism for willful continence during the commonly indefinable fertile phase in the menstrual cycle (Webster defines euphemism as an 'allusion to an offensive thing by an inoffensive expression'). To me, constrained continence of loving mates is an offensive thing and is about as 'natural' as patent leather is bovine or Bombay Duck, avian."

Describing the spontaneous functioning of the new pills, he outlined the work done in collaboration with Pincus and Chang proving the potency of artificial progestational steroids in rabbits, and the subsequent successful trials of the pill (marketed as "Enovid") in Puerto Rico and Haiti. "Clearly," he concluded, "to man's God-given protective mind, God has revealed how nature controls ovulation, when its occurrence is internally dangerous. Clearly, he is meant to use this natural method which will harmlessly protect the external threat of a birth rate that will be lethal to the divinely ordained purpose of human civilization."

STRENGTHENING HARVARD MEDICINE

In a short talk, Dr. Berry outlined plans for strengthening the "three prongs of the Harvard Medical trident:" the Faculty, the Quadrangle, the Associated Hospitals. He paid tribute to those who have made the Program

for Harvard Medicine a reality, particularly Program Chairman Ridley Watts and Program Manager Laurence Pratt. "Just a year ago," he said, "the total of the Harvard Medical Center Fund stood a bit below 18.5 million in gifts, pledges and bequests. Today, it has grown to 23.8 million." Only one of these gifts, he added, was over one million dollars. "By autumn," he said, "we are in high hopes of announcing five new endowed professorships, each of which will have been made possible through A Program for Harvard Medicine." Mention was made of additional federal help to supplement private giving for the building of the Countway Library of Medicine. Speaking of the Quadrangle, Dr. Berry noted that, "two-thirds of Building B is now renovated; the last third now, well advanced, will cost more than two million dollars." Plans for two new science buildings, to be constructed behind present buildings, one on the east and one on the west side of the Quadrangle, were among the Dean's future hopes for the Quadrangle.

Dr. Berry finished with a wacky poem entitled "Deanerwocky," which first evoked a titter, then a roar from the audience. It was, he said, written (with apologies to Lewis Carroll) by Miss Marylou Buckley, Director of Public Relations of the Program:

DEANERWOCKY

*T'was hertig and the folchi-pi
Did janeway dammin in the thorn,
All meadow was the kennedy,
And the castle solomon.*

*Beware the Berrygeorge, my son,
T'will reid you fine, it can.
Beware the yakovlev, and shun
The wacker ingraham.*

*He took his kraye sword in hand
Long time his nichols foe he sought,
So clark'd he-by the blumgart tree,
And green'd awhile in thought.*

*And as in warthin thought he stood
The Berrygeorge with eyes of flame
Came rutstein through the enders wood
And fawcett as it came.*

*One, two! One, two! and through and through
The Churchill blade went snyder-snack
He left it dead, and with its head
He joeguardella'd back.*

*And hast thou slain the Berrygeorge
Come to my arms, my burwell boy,
Oh albright day! Murray! Oh forbes
He merrill'd in his joy.*

*T'was hertig and the folchi-pi
Did janeway dammin in the thorn
All meadow was the kennedy
And the castle solomon.*

"It's very interesting," said Alice, after she had finished, "but I don't quite understand it."

"You will absorb it after awhile," said the frog, as he got up and walked away, "if you have the faculty."

FLOATING THROUGH LUNCH

A race through the rain to the tents inaugurated lunch on the Quadrangle. Howard Sprague '22 advised everyone to eat what they wanted since they would doubtless burn off the extra calories in the chilly weather. Paul Dudley White '11 having returned the previous day from a round-the-world trip, arrived late and without his bicycle and lunched on chicken and shrimp salad; a packed crowd huddled under the nether tent, a few brave souls hovered around a dripping beer tent in the middle of the Quadrangle, and the more decorous older classes were treated to tables and chairs below the main staircase. The afternoon *Boston Globe* brought no less than three front-page pictures devoted to graduate Tenley Albright, who accompanied her reuning father Hollis Albright '31; a full page of Harvard Medical luminaries, plus two stories, appeared on the inside pages.

CLASS DAY

The rampant lion spoor led toward Boston Latin School on Saturday morning. Up on the Quadrangle seats were stacked; tents were soggy and hardly a backward glance was given as umbrellas hurried down the Avenue where promptly at 10:30 Class Day ceremonies began under the Harvard Medical banner, vying very successfully with a portrait of Lincoln on the left and one of Washington on the right, as overhead, LEVERETT, FRANKLIN, MATHER et al. marched in large capitals around the molding. So successfully was the transition achieved, from the installation of a public-address system in the early morning hours (by the HMS Buildings-and-Grounds crew) to the hot lunch in the basement cafeteria (where seesaw seats, unused to heavyweights, popped riders up and down to the tune of *boeuf bourguignon*, Waldorf salad and green beans) that few were aware of the heroism of the feat.

CLASS HISTORIAN SEIDL

It was an unusual graduating class in many ways, as Class Historian Larry Seidl acknowledged: "We are the first class to be sent forth from Harvard as products of the co-ordinated curriculum experiment." The team approach in instruction in the preclinical sciences, he said, had been meticulously dissected in many other places including the soundtrack recordings of the annual second-year musical extravaganzas in each year since 1957 and in the *Oedipus Colonos* review of 1958.

Three members of the Faculty received particular mention: Anatomy's George Erikson ("His sound advice that the study of a biological problem necessitates a repeated

return to the fundamentals of the discipline . . . is in my opinion the essence of the Harvard approach"); Psychology's John Nemiah '43B ("His lectures on the pathophysiology of the psyche were delivered to packed houses and ended in standing ovations"); and Pathology's Arthur T. Hertig '30 ("We learned so to admire the owner of that slow sonorous drawling mid-western voice from the back row that we have dedicated the 1961 *Aesculapiad* to him").

"It is interesting to note," said Seidl, "that by rough count twenty (out of a class of 131) plan at this time to go into neurology or psychiatry." With excusable pride he added: "We are a diverse assortment of accomplished musicians; athletes including two world champions in winter sports; thrice have we sent our representatives into the annual Undergraduate Assembly and three times come away with the coveted Soma Weiss award for the year's best student research; our chests will collectively swell with pride as the degree of doctor of medicine, *summa cum laude* for the fourth time in the history of Harvard Medical School, is awarded one of our number" (John Loeb).

In one regard, he admitted, graduation did have its drawbacks. "My mother," he explained, "has threatened to terminate my allowance. And over the years, I have found a number of uses for that 75c each week!"

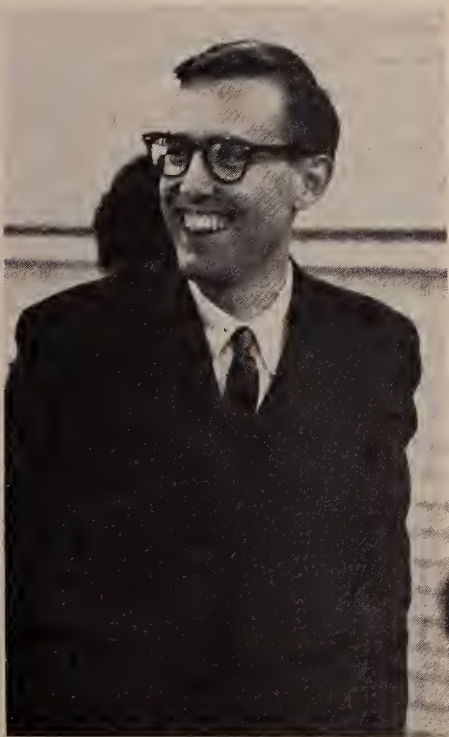
BLUMGART COMING AND GOING

The Class Day Speaker, Professor of Medicine and Head of the Department at Beth Israel Hospital, Herrman L. Blumgart '21, had four years previously delivered the first lecture to the incoming Class of 1961. In this as well as other ways, he was a fitting choice for Class Day speaker and proved it by covering no less than 300 years of Harvard history plus a philosophy for the future, all in 35 minutes. Noting the 100th Anniversary of the Civil War, he recalled that most of the 52 students of the graduating class of 1861 were soon in uniform and dying, either on the battlefields or of "bilious and putrid fevers and dysentery." Within a year, almost every remaining Harvard Medical student had enlisted. The son of Dr. Oliver Wendell Holmes, later to become the famous Supreme Court Justice, lay "almost exsanguinated on the fields of Gettysburg until rescued by a corpsman, and made an almost miraculous recovery. I believe," Dr. Blumgart said, "we may conclude that the stress and strain of our time is no more than that of bygone eras — that life contains no safe harbors — but demands today, as it always has, vigor, courage and zest."

That each graduate choose what he would commit himself to know and what he would be resigned not to know; that each be aware of his privileges and duties as a citizen, and that each consider our national effort to assist other peoples in a life free from want — these were the guideposts which Dr. Blumgart set for a centrifugal future.



CLASS DAY



Challoner: Alumni Award



Loeb: summa cum laude



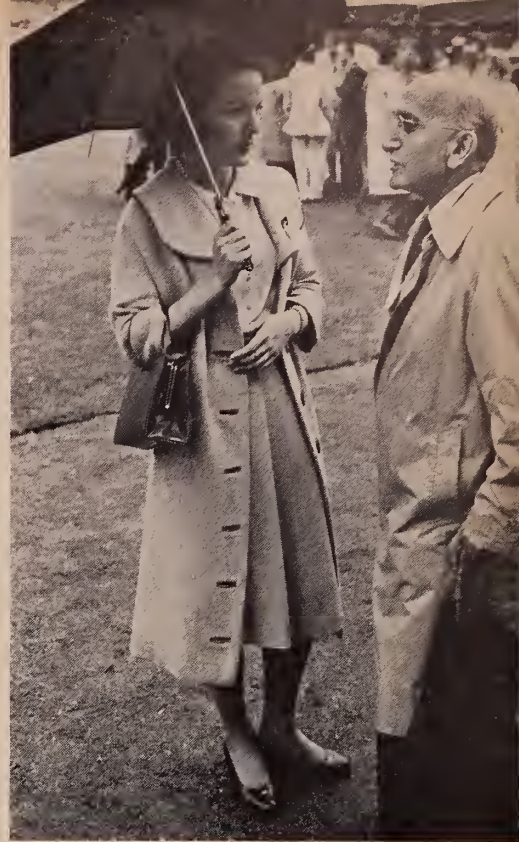
Seidl: Class Historian



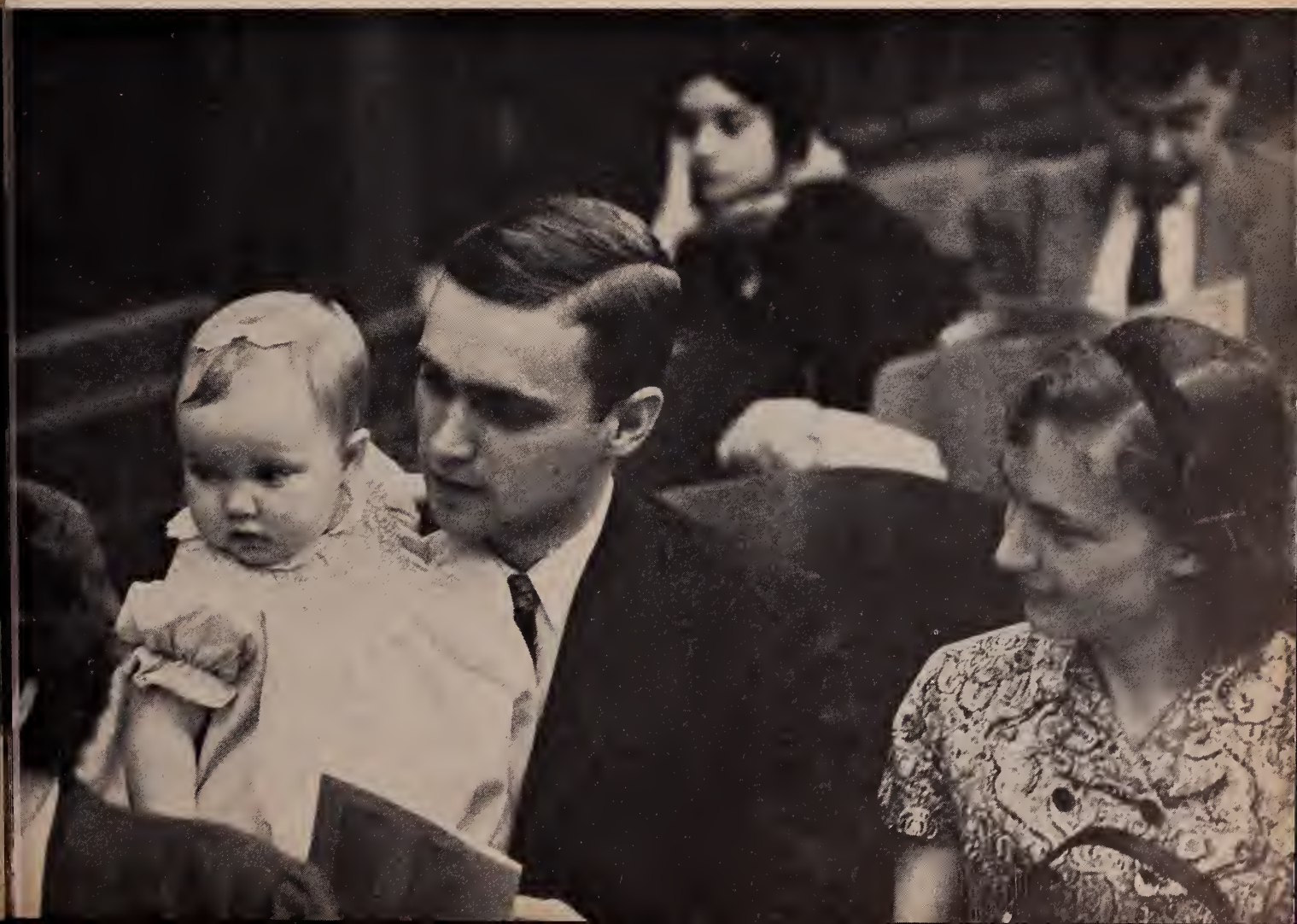
"Just a crust of bread?"



"... and in ten more years you'll be a doctor!" — Douglas Almond accepts congratulations from Dean Joseph Gardella



"Maybe it'll freeze." Tenley Albright '61 with Samuel Levine '14.



HEALERS OF BODY AND SPIRIT

AFTER getting my M.D. from HMS in 1955, I entered the Harvard Divinity School and graduated with the Class of 1959. I am presently in the residency program in psychiatry at the Massachusetts Mental Health Center, where I will be chief resident next year. Using my medico-theological background, I hope to encourage patient contact with local parish organizations as an aid in their rehabilitation.

My beginnings in medicine were similar to those of every physician — I was a patient. At the age of five, I had an appendectomy, and at 14, a period of epileptiform seizures. Both experiences were frightening and I have retained their vivid memory. What a difference to my life it made that skillful and understanding physicians were present! The memory of these men decidedly influenced my decision to enter the service of medicine, rather than that of the church.

I had considered the ministry during my adolescence in Cincinnati. This was not unusual in view of my Baptist upbringing with its emphasis on 'salvation' both for life and for the hereafter. Again in England, on a schoolboy exchange program, I considered the ministry, particularly when I saw the heritage of the Middle Ages and became more historically informed. For I saw that the Christian spirit had raised a powerful and enduring culture which in some ways was the cornerstone of our own age of science. Thinking of all events as causally determined was a centuries-long discipline, I found, and our own age of science could not have come into existence without it.

At Harvard College I straddled the fence, taking Greek and German as a possible preparation for the ministry,

and doing the minimum number of courses for admission to the Harvard Medical School. As a college freshman I visited Dean Fitz at HMS for advice on the best possible preparation for medical school. He informed me that as many HMS students prepared for medicine outside the sciences as within.

While at college I attended Sam Miller's Old Cambridge Baptist Church regularly, before Miller became the Dean of the Harvard Divinity School. Both Paul Tillich, who preached there when I was a freshman, and Miller acquainted me with the then novel idea of the church's healing function. When the time came to decide between medicine and theology, however, I chose medicine because it brought care in a tangible form to those in need. When my medical-school application came due I found myself saying in my essay that medicine seemed the place where science met the humanities.

In my four years' work at HMS, I amassed considerable knowledge of the workings of a person's insides. But I still had no concept of man from the humanities' point of view which could match in its breadth and depth of satisfaction my biological understanding. Nor could I really feel much save despair when I wondered about the enormous energies I expended on the cirrhotic who was certain to resume the behavior that led to liver disease. Psychiatry was of little help to me, although it took a broader view of man, for its language was so strange that I wasn't sure what it meant or where it came from.

It was this sense of personal dissatisfaction that I sought to settle when I began theological training after receiving my M.D. Because of my conviction that the heart of our culture lay in the religious spirit, and the heart of Western thought in the long Hebrew-Christian interpretation of man, I chose to study theology. It seemed to me that to understand Western man involved an adequate grasp of this theological foundation, knowledge as fundamental as the sciences to preserving his health. The Boylston Society paper that I prepared in my last year at HMS dealt with ideas of sickness and health and I tried to show that even within the limits of physical illness and disability there can be a kind of sure health. I remember noting that the Anglo-Saxon word "hal," which became our word "health," also carried meanings of holiness and wholeness. Later, at the Divinity School, in my New Testament studies, I noted that the Greek word meaning "to save" in the religious sense means also "to heal" from physical disease. These findings reinforced my idea that theology and medicine have a common ground in man, at some point in his deepest experience.

What have I so far drawn from this medical and theological experience? A conviction, first, that Western culture from its Hebrew-Christian sources is concerned that

Stuart Q. Flerlage '55



Three Graduates Who Hold Degrees in Medicine and Theology

man realize the wholeness of his identity in all its dimensions, religious, biological, psychological and social; and secondly, that suffering has an essentially positive meaning in achieving this wholeness. This in no way endorses suffering for the sake of suffering or suffering as an end in itself. It means that suffering indicates the presence of something wrong, of a limit to our wholeness, and therefore must somehow be discovered and removed to permit the larger wholeness of health.

I have chosen medicine as my profession, psychiatry in particular, as it best combines a concern for the biological, psychological and social dimensions of man and provides the best possibility of relating my theological interest. It is my conviction that our own society must regain an awareness of its reason for being: its concern for the suffering of mankind. In this regard, the increasing awareness in the medical segment of society of the need for wholeness in our care of persons seems true to the best in Western tradition.

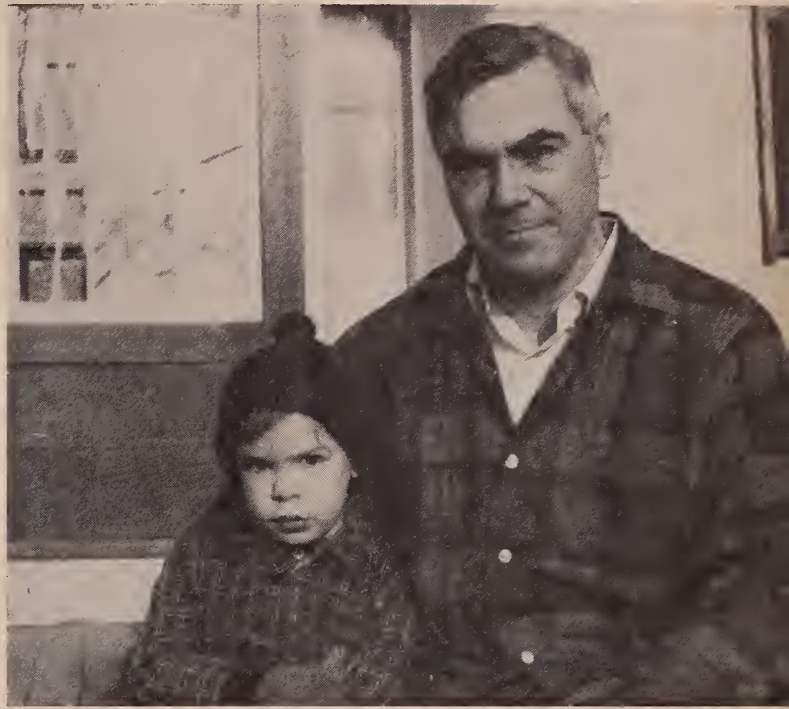
STUART Q. FLERLAGE, '55

WHEN I applied for medical school in 1944 at the age of 29, I already had a B.D. from Union Theological Seminary in 1943. Several medical schools refused to consider my application because I held an advanced degree in another field. Harvard, however, said: "We have no set rules. Do your pre-med work and we shall see." With this scant encouragement, I left my three Congregational home-mission churches in western Colorado and returned East for the necessary chemistry and physics at Boston University's intersession and summer session. I entered HMS in 1945.

In my undergraduate days at Amherst I came under the influence of the Student Christian Movement and spent my summers in Quaker work camps. After college I continued studies at Union Theological Seminary in New York City and later joined the Newark Christian Colony, a dedicated, interracial group of students. There I lived for a time in the New Jersey slums on the same economic level as the inhabitants and worked with juvenile delinquents.

This year was followed in 1941 by a year in unoccupied France doing refugee and relief work with the American Friends Service Committee. Then back to the U.S., marriage, and a final year at Seminary for the B.D. degree and ordination. After a long trek in a house trailer to a primitive, sparsely-settled ranching and mining country, we settled in Montrose County, Colorado. From our trailer we eventually moved into the parsonage, equally innocent of running water and plumbing.

As a novice couple from the East (the bride a Vassar graduate from Park Avenue learning to cook on an ancient wood-burning stove with broken grates) we ministered to six tiny, scattered communities, organized boy and girl



Henry S. Harvey '49

scout troops and ran square dances. Through it all, we felt that we were more successful in meeting our social and recreation commitments to our parishioners than in ministering to their emotional and spiritual needs. It was somewhat of a surprise to me to find that the minister's deeper human contacts were not made during pastoral calls, but when he took a day off to help the overworked ranchers branding cattle or rounding up sheep. Sunday schools and church services seemed an inadequate bridge. Feeling that my role in the ministry was failing to meet my hopes of reaching people where it mattered, or contributing to community living, I wondered if I might be more useful with a more specific tool, such as medicine.

Union Seminary had failed to make me into a churchman and Harvard failed to turn me into a specialist! Its medical training, however, enabled me to hold up my head in the company of specialists and to know when to consult them. A two-year rotating internship at the Mary Imogene Bassett Hospital continued my training and prepared me for group practice in a rural area.

The end of this saga is a satisfying life in a small but expanding Massachusetts town in a group practice with three socially concerned, Quaker physicians, the "Acton Medical Associates." The group is able to combine teaching in Boston with semi-rural general practice, and intellectual challenge with concrete service. And I find I do more counselling now than when I was hampered by the conventions of the ministry.

HENRY S. HARVEY, '49

THE facts of my life are easy to set down. I was born in Syracuse, New York in 1904, was educated at Middlesex School in Concord and Harvard College, Class of 1926. After two years of teaching at the Belmont Hill School, I entered the Harvard Medical School from which I graduated in 1932. Internships at the Presbyterian Hospital in New York and at the Boston Lying-In, and Free Hospital for Women in Brookline followed, after which I started the private practice of obstetrics in Boston as assistant to Dr. Donald Macomber. Except for two years of active duty in the Naval Reserve Medical Corps, I stayed in practice until June, 1957. In 1947, I was certified by the American Board of Obstetrics and Gynecology and in 1950 joined the staff of the Boston University School of Medicine as Associate Professor of Obstetrics and Gynecology. At this time I also joined the Smithwick Foundation which later merged with the Medical Associates of the Massachusetts Memorial Hospitals. In June, 1957, after two years of private study, I was ordained a deacon in the Protestant Episcopal Church and in December of that year was ordained a priest. Until November, 1960, I was Canon Pastor of the Cathedral Church of St. Paul in Boston and Protestant Chaplain at the New England Center Hospital when I accepted a call to be rector of St. Paul's Church in Stockbridge, where I now am.

The facts, as I said, are easy; the thinking behind them is more complicated, particularly the thinking that led me to give up medicine in favor of the ministry. I could not have gone into the ministry, any more than into medicine, unless I had felt a call, in this case the idea rapidly growing into a certainty that this is what God wanted me to do. This was more than just an intellectual certainty for, intellectually, it was not particularly rational. I can only say that it was a decision made in faith, and for the Christian, faith means commitment. The idea came through trying to help patients and friends who were in trouble, particularly those who were sterile or had long and disabling illnesses, patients whose babies were stillborn or mongolian, patients who stood face to face with death, friends who had cancer or ones whose children had died. There was also the occasional couple who, because of tensions arising during pregnancy, came to the point of divorce and thereby not only gave themselves and their friends much unhappiness, but also did irreparable damage to their children. In all of these situations I found my interest and efforts going beyond the medical problems to the spiritual ones, to helping the patient understand the tremendous opportunities these problems presented for spiritual growth — growth in understanding, in tolerance, in outgoing love.

Facing such things, I found I did not know enough to be really helpful, and believing sincerely that Christianity had the answers, I began to read a little theology. This opened up a tremendously exciting field which quickly claimed my interest.

Here I must, with thankful joy, pay tribute to my wife,



G. Douglas Krumbhaar '32

whose Christian life, and deep sense of commitment, were not only an inspiration and a practical help in what I was trying to do, but were also a tremendous influence in helping me to realize how necessary it was. It was she who led me to understand the importance of treating the whole patient; body, mind and *soul*.

Two other facts influenced my thinking. One was the idea that a priest with a medical background might have something different, and perhaps worthwhile, to contribute to the church. The other was that someone who was both a priest and a doctor might in some small way bring the two professions closer together. I would not have you think that my going into the ministry is in any way a judgment against medicine. Christianity is a religion of healing as applied to the body as well as the soul. Christians believe that *all* healing comes from God whether it be through the skill of a physician or surgeon, the ministrations of a psychiatrist or clergyman, or from an unexplained spontaneous remission of the disease. Consequently they are ever ready to obey the injunction in the Book of Ecclesiasticus: "Honor a physician with the honor due unto him . . . for the Lord hath created him." But man has a soul as well as a mind and body and for this reason physicians and ministers must cooperate in the healing of the whole man. This will never take place until they understand each other better, and I hope and pray that I may further that understanding.

G. DOUGLAS KRUMBHAAR, '32

Reunions



Grand turnout: The Fiftieth Reunion Class

FIFTIETH REUNION

At the half-century mark, the record-breaking Class of 1911 mustered together some twenty-six celebrants, with eighteen wives, out of a possible forty survivors for a record of 67%. But we did miss our sole legislator, Senator Ernest Gruening of Alaska, who could not leave Washington because of impending votes on medical legislation. However, Paul Dudley White returned from the Antipodes via Russia and Greece where he lectured two nights previously in Salonika, in time to entertain his classmates at his home in Belmont, abetted by his gracious consort, Ina. In addition to comestibles, enough liquid anesthesia was provided to render the following tribute tolerable:

H.M.S. 1911 JUBILANT

Though like the thin, vestigial leaves
Still clinging to a wintry bough,
We wait the touch of the fateful breeze
To set us free, not soon I vow
Will memories dim or colors fade

Of Nineteen Eleven's sturdy tree
Which now has survived the fifth decade

Exhibiting relics like you and me.
The Hippocratic flame burns bright,—
Both School and Hospitals evince
A reborn spirit, erudite,
With falling death curves to convince
All men, Millennium's in sight.
And Nineteen Eleven has had a hand
In much of this, in fact still clicks
With Coronary Paul's command
By premiers and Moby Dicks,
While London's Guy's calls Howard
o'er;

Once Wesselhoeft's sobriety,
Like Weepy Bagg's some years before,
Did guide our Medical Society.

So, let us cling together now, —
Like Tim let's say forever then.
What though the last leaves on the
bough,
"God rest you Gentles, women and
men!"

EDWARD P. BAGG, 1911
Reunion Chairman

FORTY-FIFTH REUNION

The Class of 1916 held its Forty-Fifth Reunion on May 26th and 27th. Of the forty living members of the sixty-six who went through H.M.S. together, nineteen returned to participate in part, or all, of the two-day activities. All are enjoying "a green old age, unconscious of decays." Ross Golden's trip from California is proof that distance is no deterrent. For the record, the list of those in attendance follows: Maurice Briggs, Dr. and Mrs. Edmund Butler, Dr. and Mrs. Claudius Calvin, Dr. and Mrs. Thomas Goethals, Ross Golden, Edward Harding, Clarence Heyman, Dr. and Mrs. David Houston, Dr. and Mrs. Walter Lacey, Dr. and Mrs. Alfred Langmann, Franklin Lowry, Andrew Nichols, Howard Osgood, James Putnam, Charles Peabody, Dr. and Mrs. John Taylor, Henry Viets, Stanley Weld, Dr. and Mrs. Paul Withington.

"The Bacteriology-Pathology Comprehensive Examination," printed in



Dr. Edward Bagg, Chairman of the Fiftieth Reunion Class, with Mrs. Bagg

the spring issue of the *Harvard Medical Alumni Bulletin*, had fortunately forewarned reunioners of the erudite nature of the present H.M.S. "Time is of the essence — do not dawdle — you are falling behind — your time is now up — pass in test papers without any sniveling excuses." In spite of the cold East Wind and nature's lachrymosity (caused by the Arbiter's indecision between Reggie Fitz and Tommy Lanman), the program on Friday was thoroughly enjoyed and partially understood by all the classmates. We were glad to hear Dean Berry's subsequent encouraging remark to the graduates: "Full knowledge of any part of medicine is impossible."

After the ceremonies at the School and the excellent lunch served there (a most commendable show of expert efficiency in changing circumstances), the Class met at the Milton-Hoosic Club for dinner and the evening. "Tom Lanman absent was Tom Lanman still." The whole of the reunion was in a sense a memorial to him; his Classmates of 1916 paid their own special tribute to him at dinner. A letter from Gert Lanman was read, as were those from Joe Savage and Pete Scholl.

There was much talk at dinner on the subject close to the hearts of seventy-year youngsters: retirement. Most seemed to feel that if you can continue to break even with the rent it's better to let nature gradually take its course. Reminiscences of early laboratory days (cats in vents and de-

celebrated pigeons in Dr. Cannon's lab), First World War anecdotes, stories told by Alan Gregg at former reunions, remembered repartee between George Bigelow and Dennis Crile (not to be recorded here) — all this and more filled a warm and friendly evening.

It was suggested that Miss Dorothy Murphy be made an Honorary Member of the Class of 1916, and then be elected President, Vice-President, Secretary, Treasurer, and Chairman. This merely legalizes the present situation, since Dorothy Murphy has done all the work for the reunion, and to her goes full credit and appreciation.

PAUL R. WITHINGTON, '16
Reunion Chairman

FORTIETH REUNION

The Fortieth Reunion of the Class of 1921 at Harvard Medical School was held concurrently with Alumni Day and Class Day. Thirty-seven members of the Class signified their intention to attend and of these thirty-six appeared bringing with them twenty-seven wives. Unfortunately our class president was prevented from being with us by acute medical duties at home. We missed Sam Webber very much.

In spite of the worst that New England weather could conjure up, we had, as always, a lovely dinner Friday evening at the home of the Kazanjians in Belmont. Movies of previous reunions called attention to changes in shape and alacrity, altogether too convincing to some of us.

The unexpected shift of scene for Class Day to the neighboring Boston Latin School caught some of us flat-footed; however, a loyal delegation turned out for the graduation exercises, and especially to hear our classmate, Herrman Blumgart, give the Class Day address.

We all had lunch together in the Vanderbilt Hall Common Room which afforded a last chance to pick up dangling threads of fellowship before we took off again for our routine activities.

RANDOLPH K. BYER, '21
Reunion Chairman

THIRTY-FIFTH REUNION

A total of 65 '26ers and wives showed up for their H.M.S. 35th Reunion. Some representatives including Bill Boeck, Ged Gray and Jeff Larkey travelled coast to coast to join us. On Friday evening the Ritz Carleton Hotel played host to '26 with cocktails and a vintage dinner which surpassed even the high standards of its charge d'affair, Gourmet Gundersen. Stimulated by these preliminaries, repercussions, reflections and reminiscences soon blossomed under the benevolent toastmastership of Dick Stetson with able assists from President Ken Mallory, Treasurer Hank Gallup, committee members Ted Badger and Dan McSweeney and with Clark Heath's keen dead-pan humor. Claude Forkner, whose bag is always packed for overseas expeditions, guided us through the near and far East with glimpses into its palaces as guest of potentates. Assisted by occasional glances at Larry Ellis' excellent Class report and at large name tags, visible even to the myopic, the membership rapidly rolled back the years and thrived upon interpersonal computation.

Saturday dawned cold, windy and heavy with rain. Undeterred, those still in training made their various ways to Manchester-by-the-sea chez Burrage. Here they underwent further indoor, rather than the previously advertised "outdoor," sports and a New England clambake. Our honorary member Dorothy Murphy was welcomed by all as was guest Harry Trimble, 1926's first-year instructor in biochemistry.

While it is difficult to assess the success of such festivities in the absence of an Australian ballot, it is the opinion of our committee that the 35th Reunion was outstanding. For confirmatory evidence we present such comments as "best reunion I can remember since our 40th" and "can't wait 'til our next one," — variously nominated as their 45th, 50th and 60th reunion.

WALTER S. BURRAGE, '26
Reunion Chairman

THIRTIETH REUNION

The Class of 1931 had a most successful Thirtieth Reunion despite uncooperative weather. Forty-seven members of the Class and forty wives enjoyed the festivities, the majority at Kresge Hall for dinner on Friday evening and about half that number at the clambake at the Essex County Club. Ed Stimpson from the State of Washington, Charlie Steele from Maine, Iggy Thompson from Texas and George Salter from Nebraska maintained the Class's well-earned reputation for wide distribution of loyal Alumni.

Dinner in Kresge Hall on Friday night featured Captain Gerald Duffner of the Medical Corps of the U.S. Navy who discussed Submarine Medicine. Saturday afternoon the sun shone for the only time during the entire Reunion when George Sturgis supervised a walk on Singing Beach in Manchester-by-the-Sea. The excellent clambake at the Essex County Club followed, a fitting climax to a most successful Reunion.

We are very proud of the Class record as detailed in our Thirtieth Class report. The success of this excellent report is due to the Editor, Hap Kennard, and the painstaking efforts of Dorothy Murphy and Mrs. Susan Lees in the Alumni Office. In fact, it is no exaggeration to say that the success of the whole Reunion is due to the expert work of Dorothy and Mrs. Lees. To them the Reunion Committee and the entire Class are sincerely grateful.

CHARLES F. WALCOTT, '31
Reunion Chairman

TWENTY-FIFTH REUNION

For the final two weeks responses flowed on Miss Murphy and her loyal aides like confetti and on Thursday, May 25th the Twenty-Fifth Reunion of HMS '36 started with men and wives comfortably filling the Harvard Club Library for dinner. Diffidence was discarded at the door

and the group settled at once into the happy, eager, affectionate mood that characterized the affair to the end. The mood was caught and quickly fixed on us by Tom Caulfield, the toastmaster, as he reviewed the Boston scene through a quarter-century power retrospectoscope and introduced our guests, Drs. Charles Huggins, C. Sidney Burwell, Edward D. Churchill and their wives. Each engaged our post-prandial attention in his own special way, then our president, Marsh Ruffin, responded with thanks and an array of Class statistics culled from the "Red Book" that stunned all.

Alumni Day Fare satisfied every palate despite the drizzle, and the Class gift of \$53,000 was presented proudly to Dean Berry. It represents ten years of generous response to the Alumni Fund appeals, with 113 of our 129 Classmates represented and a final year increment of \$18,500.

The damp weather failed completely to modify the mood. Forty-two couples dined and danced that evening at the Country Club enchanted by the reminiscent tunes of Ruby Newman and the conviction that their dancing wasn't more sedate than before, just a little more elegant.

Saturday everyone finally agreed that the weather was wet and the Class Day Exercises were transferred to the auditorium in the Boston Latin School. The classical aura seemed to inspire a feeling of genuine grandeur which lent the proceedings an air of special fitness.

Meanwhile the unobtrusive minions of Mr. Glass had set the stage in Duxbury for the unchanging ritual of the "bake." Miraculously the rain ceased, the wind blew dry and, just as the real cooking started, the buses unloaded a gay group made doubly merry by the lucky turn of weather.

One hundred sat down in the tent when the gong sounded. Never were there such clams, such lobster, such corn, such beer, such fun. A final hour for singing to the lead of Bonnet's accordion, and then the ride back to town with everyone vowing

eternal friendship and planning a 30th Reunion that will make this one seem pedestrian by comparison!

HOWARD ULFELDER, '36
Reunion Chairman

TWENTIETH REUNION

The great and glorious Class of 1941 returned for a heroic Twentieth Reunion. Fifty-three members and wives were present. Fifteen states were represented. Oscars for distance traveled should go to Armstrong from California and Benditt from Washington.

On Friday the Alumni Association served a fine luncheon which, although marred by rainfall, was a fitting beginning to the festivities.

The dance at Vanderbilt Hall that evening was highly successful as attested by the fact that our liquor supply ran out. Nothing was more heartwarming than the thunderous ovation tendered the *ad hoc* refreshment committee who saved the day, or night, with a thrilling rescue of a hidden cache filled with suitable spirits left over from a previous expedition. The

\$200,000!

Serious business: Dorothy Murphy shepherds Alumni Giving into outer space.



men danced divinely and the ladies were lovely. During the evening, a long and bitter election was held after much debate. On the 38th ballot, Jack Schilling was elected president and Harry Miller, treasurer. The difference of opinion centered on the integrity of the treasurer. The dance continued an hour past closing time and all stayed until the bitter end. And the end *was* bitter!

Saturday morning, all awakened to hold another election, at which Raker and Culver were appointed to represent the Class at the Vanderbilt Hall luncheon.

The bus arrived at Annisquam at three o'clock for the clambake at Larry Ross's villa. Inclement weather seemed to clear after two highballs, and Skipper Ross took three boatloads for a ride around Ipswich Bay. The Hawn Glee Club was better than ever, and you know how good "ever" was. Stories, short biographical sketches, and a few other sketches were the order of the day. It was a gay crowd that, after leveling Ross castle, left in the bus singing lustily and highly protective of Johnny Allen and his precious merchandise. They all vowed they would return to Ross's — next week!

Memorable scenes: Ahrens and the tray serenade; Prout's supple dancing; Edgar's moustache; Risley's foul-weather gear; Schilling's stirring acceptance speech; Knapp; the timely arrival of the Landsteiners; Barrett's warning about hepatitis; Carter the beachcomber; Taylor's arrival from Iran.

Notable absentees: Aren't you sorry you didn't come?

Consensus of opinion: This was the greatest class that ever left H.M.S.

JOHN J. BYRNE, '41
Reunion Chairman

FIFTEENTH REUNION

Thirty-four members of the Class of 1946, wives in tow, gathered again for a Reunion week end. The unpredictable New England weather provided us with a downpour — but this we had anticipated.

Friday night a cocktail party and dinner was held at the new, centrally-located Midtown Motor Inn just constructed on Huntington Avenue opposite the Christian Science Church. We all responded in well-remembered fashion into the early morning.

Saturday afternoon and evening were spent at Castle Hill, the old Crane Estate, overlooking Crane's Beach. After a walk through the densely-wooded grounds to the beach with a brisk twenty-knot breeze blowing in with dirty low-gray clouds overhead, we were well-refreshed and ready for further activity. This was available in this grand mansion. We had the whole area to ourselves. With fireplaces ablaze the conversations mellowed easily before the dinner bell pealed and an old-fashioned New England clambake was served indoors overlooking the open Atlantic.

Prior to departing, at a somewhat earlier hour that evening, we presented Dorothy Murphy with a heart-shaped charm suitably engraved. Her response, of course, was appropriate!

As always it is regrettable that more can't be present.

ALEXANDER S. MACMILLAN, '46
Reunion Chairman

TENTH REUNION

The Class of 1951, undaunted by the elements, turned out for a very pleasant Tenth Reunion. Envoys converged from California (Manson and Murphy), Oregon (Krakauer), Minnesota (Plum), Illinois (Haymond), Missouri (Danforth and Elser), Ohio (Fernald and Tetirick), Florida (Nevis), Georgia (Tuttle), South Carolina (Theus), North Carolina (Summer), Virginia (Richardson and Zukoski), Maryland (Woodbury), New Jersey (Kushnik), and a sizable collection from New York, Connecticut and points Northeast (too numerous to name). A little less hair here and there was obvious — but otherwise we all looked as young as ever (wives included!). Dave Bikoff continues to look prosperous — this year it's a Cadillac.

Friday night we repaired to the Cambridge Boat Club on the Charles

for a dinner dance. It was raining outside and "wet" inside. No one fell into the Charles and everyone had a fine time. Galdston, Krakauer and Ellison saw to it that the bartender was kept busy. A "nightcap" at the Reid's brought us well into Saturday.

Saturday afternoon found most of us at the lovely Ames' Estate in Bay View (Gloucester) — thanks to the Robey's. The weather cleared, the beer flowed, and a wonderful clambake was served up. Pleasant reminiscences by a warming fire brought to an end our very successful Tenth Reunion. See you at the Fifteenth.

GERALD S. FOSTER, '51
Reunion Chairman

FIFTH REUNION

Amid cries of, "But it never rains on Reunions!", the Class of 1956 floated together for their Foaming Fifth. Debarking from the ark on Friday night we sought refuge in the upper reaches of the Boston Yacht Club and combatted the ill effects of cold and damp with ample medicinal spirits. After this evening of feasting and dancing we again convened on Saturday afternoon for a "picnic." By this time the deluge was sufficiently advanced that said "picnic" had to be held on "high ground," namely the Penthouse of the White Building of the M.G.H.

One complication of the picnic dinner arose when our caterer brought raw chicken to be barbecued on the scene. After kindling a fire in the yard of the old morgue, dinner was nearly extinguished by the hospital maintenance men, who, on seeing the smoke, feared that the M.G.H. was burning down.

Our citation for "Traveler of the Class" goes to Jim McArthur who, in his devotion to fellowship (and a special female), flew on from London. Honorable mention goes to the Laferties who made the trek from Cleveland to join us — and with no ulterior motives. Thirty-eight Class members came to the festivities, in the company of some twenty-seven wives (or female friends).

HERBERT E. KAUFMANN, '56
Reunion Chairman

